

• ORIGINAL ACT
NCA:na
(1997) W/ATT
COPY letter GENERAL

August 29, 1997

Mr. Gary Burchard
Hydrologist
WPAPS - MU
3033 North Central Avenue
Phoenix, Arizona 85012

15-3355/47

Subject: Alert Levels and Aquifer Quality Limits for Groundwater Compliance Monitoring, BHP Copper Company, Florence, Arizona

Dear Mr. Burchard:

Enclosed are four tables showing alert levels and aquifer water quality limits for the 31 point of compliance groundwater wells at the BHP Florence facility. Also included in the tables are data used to calculate the compliance limits and outliers that were removed prior to calculation of the limits. These are essentially the same tables that we sent to you on July 16, 1997, except that alert levels have been calculated for Mg, SO₄ and TDS in well O49-GL. As you discussed with Mr. Southall, BHP refurbished O49-GL and collected additional samples. Methods used to calculate the compliance limits are described in a report submitted to you on February 26, 1997 entitled Procedure for Determining Alert Levels and Aquifer Quality Limits for Groundwater Compliance Monitoring.

If you have questions regarding this report, please contact Jarrell Southall at 602-222-4533 or me at 208-336-1340.

Very truly yours,

BROWN AND CALDWELL

Nadine C. Adkins

Nadine C. Adkins, Ph.D., P.E.
Engineer

NCA:na
Enclosure

cc. Mr. Jarrell Southall, Phoenix, Brown and Caldwell

**ALERT LEVELS AND AQUIFER QUALITY LIMITS FOR
GROUNDWATER COMPLIANCE MONITORING**

BHP Copper Company
Florence, Arizona

August 29, 1997

TABLE OF CONTENTS

Table 1. Alert Levels for Intrawell Comparisons

Table 2. Alert Levels for Interwell Comparisons

Table 3. Aquifer Quality Limits for Intrawell Comparisons

Table 4. Aquifer Quality Limits for Interwell Comparisons

TABLE 1
ALERT LEVELS FOR INTRAWELL COMPARISONS

Table 1c. Alert Levels for Intrawell Comparisons

Well	M1-GL						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95	16	80	0.96	560	7.5	14	
Aug-95	15	66	0.80	600	7.5	-10	1.8
Sep-95	18	74	0.66	640	7.3	-4.0	1.3
Oct-95	18	54	0.76	580	7.4	-2.7	0.79
Nov-95	17	57	0.50	600	7.4	-3.2	0.31
Dec-95	18	73	0.91	620	7.4	40	0.65
Jan-96	17	61	0.55	570	7.5	-2.9	0.61
Feb-96	17	59	0.54	570	7.2	-24	0.41
Mar-96	17	58	0.76	590	7.4	7.6	0.54
Apr-96	17	60	0.71	610	7.4	17	0.61
May-96	18	61	0.66	580	7.4	13	0.50
Jun-96	18	62	0.69	630	7.5	16	1.6
Jul-96							0.48
Aug-96							
Sep-96							
Oct-96							
Nov-96							
Dec-96							
Jan-97							
Feb-97							
Mar-97							
Apr-97							
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	17.2	63.8	0.708	596	7.41	5.03	0.804
SD	0.937	7.91	0.141	25.4	0.0900	16.4	0.496
Level I							
AL (upper)	20	87	1.1	669	NA	NA	NA
Level II							
AL (upper)	21	94	1.2	693	7.8	68	2.7
					7.1		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Tab. I. Alert Levels for Intrawell Comparisons

Well	M2-GU						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95	26	170	0.77	900	7.4	0.10	
Jul-95	26	190	0.91	890	7.3	2.5	
Aug-95	26	180	0.70	880	7.3	-13	1.3
Sep-95	27	180	0.59	900	7.1	-12	1.8
Oct-95	28	180	0.83	880	7.1	-4.2	0.40
Nov-95	27	160	0.46	940	7.3	-0.90	0.10
Dec-95	26	170	0.51	900	7.4	-4.6	0.87
Jan-96	23	160	0.69	890	7.4	-7.5	0.81
Feb-96	26	160	0.64	880	6.9	-17	0.58
Mar-96	23	160	0.77	850	7.3	-23	0.10
Apr-96	22	160	0.75	820	7.1	-0.19	0.45
May-96	25	170	0.67	830	7.0	-7.4	0.22
Jun-96							0.72
Jul-96							0.28
Aug-96							
Sep-96							
Oct-96							
Nov-96							
Dec-96							
Jan-97							
Feb-97							
Mar-97							
Apr-97							
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	25.4	170	0.691	880	7.22	-7.20	0.636
SD	1.83	10.4	0.129	33.0	0.170	7.66	0.510
Level I							
AL (upper)	31	200	1.1	975	NA	NA	NA
Level II							
AL (upper)	32	210	1.2	1006	7.9	22	2.6
					6.6		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[redacted] -- Outlier removed prior to calculating alert levels

Table 1. Alert Levels for Intrawell Comparisons

Well	M3-GL						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95	18	110	0.68	660	7.3	5.7	
Jul-95	20	130	0.78	710	7.4	7.0	1.8
Aug-95	20	100	0.050	700	7.4	-12	1.3
Sep-95	19	99	0.50	690	7.3	-13	1.3
Oct-95	21	110	0.67	680	7.3	0.29	0.50
Nov-95	20	120	0.39	710	7.5	1.0	4.9
Dec-95	20	120	0.69	690	7.3	-5.9	1.1
Jan-96	19	100	0.57	690	7.6	-27	0.89
Feb-96	20	100	0.56	620	7.4	11	0.80
Mar-96	20	110	0.63	660	7.3	26	0.27
Apr-96	19	100	0.57	680	7.2	11	0.35
May-96	20	100	0.60	680	7.4	22	0.10
Jun-96			0.54				0.32
Jul-96							0.40
Aug-96							
Sep-96							
Oct-96							
Nov-96							
Dec-96							
Jan-97							
Feb-97							
Mar-97							
Apr-97							
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	19.7	108	0.598	681	7.37	2.23	0.757
SD	0.778	10.4	0.102	25.0	0.107	15.0	0.524
Level I							
AL (upper)	22	138	0.89	753	NA	NA	NA
Level II							
AL (upper)	23	148	0.99	776	7.8	59	2.8
					7.0		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[REDACTED] -- Outlier removed prior to calculating alert levels

Table 1c. Alert Levels for Intrawell Comparisons

Well	M4-O						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95	7.3	130	2.0	670	7.4	4.1	
Jul-95	9.0	150	2.6	680	7.1	6.8	
Aug-95	7.0	98	2.1	580	7.5	-12	1.3
Sep-95	11	150	1.7	800	7.2	-7.0	1.3
Oct-95	14	160	1.7	800	7.2	-2.8	0.93
Nov-95	17	190	1.1	1100	7.3	29	0.96
Dec-95	12	160	1.7	840	7.2	-3.1	1.5
Jan-96	8.4	110	1.5	690	7.6	-16	0.55
Feb-96	6.8	96	2.0	520	7.7	6.1	0.98
Mar-96	6.3	85	2.3	540	7.2	4.2	0.67
Apr-96	5.3	75	2.0	540	7.2	12	0.67
May-96	5.1	72	2.3	490	7.3	-1.8	0.18
Jun-96							0.97
Jul-96							0.84
Aug-96							
Sep-96							
Oct-96							
Nov-96							
Dec-96							
Jan-97							
Feb-97							
Mar-97							
Apr-97							
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	9.10	123	1.92	688	7.32	1.63	0.903
SD	3.69	38.9	0.404	176	0.186	11.9	0.361
Level I							
AL (upper)	20	235	3.1	1195	NA	NA	NA
Level II							
AL (upper)	23	271	3.5	1360	8.0	47	2.3
AL (lower)					6.6		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[redacted] -- Outlier removed prior to calculating alert levels

Table 1c. Alert Levels for Intrawell Comparisons

Well	M6-GU						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95	2.7	68	0.55	440	8.5	8.0	
Aug-95	2.7	51	0.63	380	8.2	-1.4	2.6
Sep-95	2.9	48	0.61	380	8.2	-5.0	0.80
Oct-95	2.9	49	0.75	360	8.4	3.9	0.35
Nov-95	3.0	49	0.34	380	8.6	24	0.38
Dec-95	3.0	73	0.81	390	8.0	-6.5	0.34
Jan-96	2.9	51	0.79	350	7.9	4.5	2.1
Feb-96	3.0	51	0.60	380	8.1	4.5	0.39
Mar-96	2.8	49	0.80	380	8.3	11	0.37
Apr-96	2.7	48	0.71	360	8.2	25	0.39
May-96	2.9	52	0.72	370	8.3	20	0.29
Jun-96	0.20	71	2.0	350	8.7	4.6	1.3
Jul-96	2.8		0.76				0.25
Aug-96							
Sep-96							
Oct-96							
Nov-96							
Dec-96							
Jan-97							
Feb-97							
Mar-97							
Apr-97							
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	2.86	55.0	0.673	377	8.28	7.72	0.792
SD	0.116	9.59	0.136	23.9	0.237	10.6	0.783
Level I							
AL (upper)	3.2	83	1.1	445	NA	NA	NA
Level II							
AL (upper)	3.3	92	1.2	468	9.2	48	3.8
					7.4		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[REDACTED] -- Outlier removed prior to calculating alert levels

Table I. Alert Levels for Intrawell Comparisons

Well	M7-GL						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95	0.18	43	1.3	300	9.6	13	0.80
Sep-95	0.49	33	0.78	300	9.8	-5.0	1.3
Oct-95	0.30	24	1.2	280	9.4	41	0.13
Nov-95	0.20	14	0.55	280	9.5	11	0.42
Dec-95	0.15	46	1.1	310	9.5	32	0.53
Jan-96	0.16	26	0.82	300	9.6	-8.2	0.62
Feb-96	0.15	30	0.83	280	9.2	0.39	0.35
Mar-96	0.23	30	1.1	290	9.3	0.67	0.85
Apr-96	0.15	30	1.0	260	9.4	-2.3	0.48
May-96	0.22	33	0.81	280	9.4	-12	0.27
Jun-96	0.18	31	0.82	270	9.2	2.6	0.40
Jul-96	0.18	34	0.92	290	9.1	2.4	0.52
Aug-96	0.25						
Sep-96							
Oct-96							
Nov-96							
Dec-96							
Jan-97							
Feb-97							
Mar-97							
Apr-97							
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	0.196	31.2	0.936	287	9.42	6.22	0.556
SD	0.0466	8.27	0.211	14.4	0.199	15.8	0.311
Level I							
AL (upper)	0.33	55	1.5	328	NA	NA	NA
Level II							
AL (upper)	0.37	63	1.7	342	10	66	1.7
AL (lower)					8.7		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[REDACTED] -- Outlier removed prior to calculating alert levels

Table 1. Alert Levels for Intrawell Comparisons

Well	M8-O						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95	0.29	78	1.6	350	9.1	-5.6	
Aug-95	0.24	71	2.1	370	8.6	15	0.80
Sep-95	0.27	83	2.8	370	8.7	-9.0	1.3
Oct-95	0.24	71	2.4	360	8.7	-11	0.37
Nov-95	0.25	68	1.4	390	8.8	-17	0.71
Dec-95	0.19	70	2.3	410	8.6	13	1.2
Jan-96	0.18	76	2.5	340	8.5	-22	0.75
Feb-96	0.16	74	2.0	360	8.4	4.3	0.090
Mar-96	0.15	70	2.2	370	8.6	-17	0.29
Apr-96	0.16	70	2.2	360	8.5	24	0.46
May-96	0.37	72	2.3	360	8.6	2.4	0.44
Jun-96	2.7	49	0.64	370	8.3	4.5	0.41
Jul-96	0.17	71					0.40
Aug-96							
Sep-96							
Oct-96							
Nov-96							
Dec-96							
Jan-97							
Feb-97							
Mar-97							
Apr-97							
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	0.223	72.8	2.04	368	8.62	-1.56	0.601
SD	0.0665	4.26	0.578	18.2	0.204	14.5	0.362
Level I							
AL (upper)	0.41	85	3.7	420	NA	NA	NA
Level II							
AL (upper)	0.48	89	4.2	437	9.4	54	2.0
AL (lower)					7.8		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[REDACTED] -- Outlier removed prior to calculating alert levels

Table 1c. Alert Levels for Intrawell Comparisons

Well	M14-GL						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95	4.9	98	0.38	570	7.9	15	36
Aug-95	4.5	63	0.65	480	8.2	-2.5	4.3
Sep-95	4.6	79	0.36	510	8.1	-3.0	1.3
Oct-95	5.5	63	0.43	530	8.0	27	0.83
Nov-95	5.1	68	0.25	530	8.1	52	0.63
Dec-95	4.7	64	0.75	490	8.0	-15	1.8
Jan-96	4.7	71	0.40	510	7.9	9.3	1.1
Feb-96	5.1	65	0.36	500	7.5	28	0.58
Mar-96	3.1	58	0.64	500	8.1	35	1.0
Apr-96	2.7	57	0.60	470	8.1	15	0.87
May-96	7.3	77	0.38	530	7.8	12	0.48
Jun-96	5.8	64	0.50	510	7.9	27	0.45
Jul-96							1.1
Aug-96							
Sep-96							
Oct-96							
Nov-96							
Dec-96							
Jan-97							1.5
Feb-97							
Mar-97							
Apr-97							
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	4.83	68.9	0.475	511	7.97	16.7	0.969
SD	1.18	11.3	0.152	26.8	0.187	18.5	0.413
Level I							
AL (upper)	8.2	102	0.91	588	NA	NA	NA
Level II							
AL (upper)	9.3	112	1.1	613	8.7	87	2.5
					7.3		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Tab. .. Alert Levels for Intrawell Comparisons

Well	M15-GU						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95	25	80	0.35	870	7.7	4.0	
Aug-95	26	68	0.64	910	7.5	-11	1.3
Sep-95	26	83	0.56	990	7.4	-6.0	1.3
Oct-95	27	66	0.47	860	7.4	-2.1	-0.018
Nov-95	26	74	0.26	900	7.4	-26	1.2
Dec-95	25	73	0.72	930	7.5	-14	0.75
Jan-96	27	80	0.37	790	7.5	-24	1.3
Feb-96	22	66	0.28	690	7.2	0.73	0.73
Mar-96	22	64	0.51	770	7.4	-12	0.53
Apr-96	24	66	0.44	700	7.4	7.3	0.61
May-96	25	82	0.34	790	7.5	-13	0.37
Jun-96	24	74	0.42	820	7.5	3.1	0.16
Jul-96							2.0
Aug-96							
Sep-96							
Oct-96							
Nov-96							
Dec-96							
Jan-97							
Feb-97							
Mar-97							
Apr-97							
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	24.9	73.0	0.447	835	7.45	-7.74	0.846
SD	1.68	6.97	0.141	91.7	0.117	10.8	0.570
Level I							
AL (upper)	30	93	0.85	1099	NA	NA	NA
Level II							
AL (upper)	31	100	0.99	1185	7.9	33	3.0
					7.0		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Table . Alert Levels for Intrawell Comparisons

Well	M16-GU						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95	29	170	0.50	1000	6.8	15	
Aug-95	28	160	0.63	980	7.4	5.8	2.4
Sep-95	28	150	0.48	1100	7.3	-3.0	1.8
Oct-95	30	150	0.64	1000	7.5	1.0	0.23
Nov-95	29	150	0.30	1100	7.5	-11	0.77
Dec-95	28	150	0.85	1000	7.5	5.5	1.2
Jan-96	30	140	0.45	910	7.4	-27	1.2
Feb-96	28	140	0.41	950	6.5	26	0.46
Mar-96	28	140	0.70	1020	7.2	-3.0	0.82
Apr-96	28	140	0.73	910	7.4	-3.7	0.58
May-96	29	140	0.50	1000	7.1	27	0.58
Jun-96	29	140	0.53	970	7.5	-4.6	0.28
Jul-96							0.64
Aug-96							
Sep-96							
Oct-96							
Nov-96							
Dec-96							
Jan-97							
Feb-97							
Mar-97							
Apr-97							
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	28.7	148	0.560	995	7.26	2.33	0.912
SD	0.778	9.65	0.154	60.4	0.318	15.3	0.643
Level I							
AL (upper)	31	175	1.0	1169	NA	NA	NA
Level II							
AL (upper)	32	184	1.1	1226	8.5	61	3.4
AL (lower)					6.0		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Table 1. Alert Levels for Intrawell Comparisons

Well	M17-GL						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	6.0	150	0.68	600	9.1	7.3	0.57
Jun-96	5.4	140	0.78	550	9.0	-3.2	0.55
Jul-96	5.1	140	0.72	500	9.1	-6.8	0.91
Aug-96	5.2	130	0.81	550	9.0	24	0.74
Sep-96	5.6	130	0.93	520	8.9	-4.0	0.58
Oct-96	5.3	130	0.99	500	8.6	-7.2	0.54
Nov-96	5.7	120	0.66	510	8.8	-7.8	0.31
Dec-96	5.5	120	0.70	500	8.6	-3.4	0.96
Jan-97	5.1	120	0.70	460	8.4	-4.0	0.50
Feb-97	5.6	120	0.86	500	8.3	-2.2	0.54
Mar-97	5.1	120	0.63	500	8.5	1.8	0.90
Apr-97	5.1	120	0.67	490	8.3	0.21	0.91
May-97					-0.90		
Jun-97							
Jul-97							
Aug-97							
Mean	5.39	128	0.761	515	8.72	-2.52	0.668
SD	0.294	10.3	0.115	36.3	0.304	4.24	0.209
Level I							
AL (upper)	6.2	158	1.1	620	NA	NA	NA
Level II							
AL (upper)	6.5	168	1.2	654	9.9	14	1.5
AL (lower)					7.6		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Tab I. Alert Levels for Intrawell Comparisons

Well	M18-GU						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95	21	210	1.2	810	7.4	0.90	
Aug-95	20	170	0.81	790	7.3	-6.0	1.8
Sep-95	22	160	0.78	870	7.1	-13	2.2
Oct-95	20	160	0.87	790	7.3	13	0.44
Nov-95	21	160	0.60	850	7.3	-13	0.73
Dec-95	21	170	1.0	830	7.3	114	0.53
Jan-96	21	170	0.75	830	7.2	30	0.82
Feb-96	20	160	0.61	790	6.7	-30	1.4
Mar-96	21	170	0.87	810	7.2	9.4	0.71
Apr-96	20	160	0.81	790	7.2	-7.3	0.62
May-96	20	170	0.79	790	7.1	-0.87	-0.12
Jun-96	20	160	0.85	800	7.3	11	0.41
Jul-96		180			7.0	16	0.28
Aug-96							
Sep-96							
Oct-96							
Nov-96							
Dec-96							
Jan-97							
Feb-97							
Mar-97							
Apr-97							
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	20.6	166	0.828	813	7.23	0.906	0.821
SD	0.669	6.69	0.160	27.0	0.114	16.0	0.665
Level I							
AL (upper)	23	185	1.3	890	NA	NA	NA
Level II							
AL (upper)	23	191	1.4	916	7.7	62	3.4
AL (lower)					6.8		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[REDACTED] -- Outlier removed prior to calculating alert levels

Tab. .. Alert Levels for Intrawell Comparisons

Well	M19-LBF						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	11	55	0.48	480	7.5	-0.69	0.50
Jun-96	11	53	0.40	460	7.6	-5.8	0.53
Jul-96	12	52	0.44	460	7.7	-9.5	0.80
Aug-96	11	57	0.42	460	7.8	-7.4	3.6
Sep-96	12	52	0.48	480	7.7	-13	0.91
Oct-96	12	56	0.42	480	7.6	1.3	0.98
Nov-96	12	52	0.43	480	7.6	-9.8	0.58
Dec-96	11	52	0.40	470	7.8	-3.8	0.53
Jan-97	12	52	0.58	430	7.6	2.2	0.45
Feb-97	12	50	0.54	480	7.7	1.8	0.41
Mar-97	11	52	0.50	450	7.7	9.9	0.80
Apr-97	11	52	0.40	490	7.7	-6.2	0.55
May-97							1.6
Jun-97							
Jul-97							
Aug-97							
Mean	11.5	52.9	0.457	468	7.67	-3.40	0.718
SD	0.522	2.02	0.0591	17.0	0.0888	6.49	0.329
Level I							
AL (upper)	13	59	0.63	517	NA	NA	NA
Level II							
AL (upper)	13	61	0.68	533	8.0	21	2.0
AL (lower)					7.3		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Table I. Alert Levels for Intrawell Comparisons

Well	M20-O						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	7.5	67	0.75	500	8.4	-7.4	0.74
Jun-96	8.0	65	0.66	490	7.9	-3.9	0.86
Jul-96	8.4	64	0.75	500	7.5	4.9	0.42
Aug-96	8.4	65	0.71	490	7.6	55	0.48
Sep-96	8.6	66	0.92	490	7.6	20	0.84
Oct-96	8.8	64	0.96	480	7.4	6.5	1.0
Nov-96	8.6	65	0.69	480	7.5	-20	0.77
Dec-96	8.3	64	0.70	480	7.3	-5.3	0.81
Jan-97	7.7	65	0.77	490	7.4	-4.1	0.59
Feb-97	8.1	66	0.85	480	7.3	-8.6	0.43
Mar-97	7.6	66	0.65	490	7.4	0.94	0.57
Apr-97	7.9	66	1.0	440	7.4	-13	0.30
May-97				490	7.5	-12	
Jun-97							
Jul-97							
Aug-97							
Mean	8.16	65.3	0.784	488	7.48	-3.56	0.653
SD	0.425	0.965	0.120	7.18	0.164	10.6	0.221
Level I							
AL (upper)	9.4	68	1.1	509	NA	NA	NA
Level II							
AL (upper)	10	69	1.2	516	8.1	37	1.5
AL (lower)					6.9		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Tab 1. Alert Levels for Intrawell Comparisons

Well	M20-O							
	Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date								
Jun-95								
Jul-95								
Aug-95								
Sep-95								
Oct-95								
Nov-95								
Dec-95								
Jan-96								
Feb-96								
Mar-96								
Apr-96								
May-96	7.5	67	0.75	500	8.4	-7.4	0.74	
Jun-96	8.0	65	0.66	490	7.9	-3.9	0.86	
Jul-96	8.4	64	0.75	500	7.5	4.9	0.42	
Aug-96	8.4	65	0.71	490	7.6	55	0.48	
Sep-96	8.6	66	0.92	490	7.6	20	0.84	
Oct-96	8.8	64	0.96	480	7.4	6.5	1.0	
Nov-96	8.6	65	0.69	480	7.5	-20	0.77	
Dec-96	8.3	64	0.70	480	7.3	-5.3	0.81	
Jan-97	7.7	65	0.77	490	7.4	-4.1	0.59	
Feb-97	8.1	66	0.85	480	7.3	-8.6	0.43	
Mar-97	7.6	66	0.65	490	7.4	0.94	0.57	
Apr-97	7.9	66	1.0	440	7.4	-13	0.30	
May-97				490	7.5	-12		
Jun-97								
Jul-97								
Aug-97								
Mean	8.16	65.3	0.784	488	7.48	-3.56	0.653	
SD	0.425	0.965	0.120	7.18	0.164	10.6	0.221	
Level I								
AL (upper)	9.4	68	1.1	509	NA	NA	NA	
Level II								
AL (upper)	10	69	1.2	516	8.1	37	1.5	
AL (lower)					6.9			

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Tab. 1. Alert Levels for Intrawell Comparisons

Well	M21-UBF						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	48	270	0.58	1700	7.0	-6.7	0.86
Jun-96	51	280	0.47	1600	7.1	7.8	0.57
Jul-96	51	260	0.55	1500	7.1	4.3	0.30
Aug-96	54	320	0.50	1700	7.1	20	0.52
Sep-96	53	270	0.55	1800	7.1	23	1.2
Oct-96	52	290	0.53	1700	7.0	-11	0.35
Nov-96	52	280	0.50	1700	7.1	-5.4	0.15
Dec-96	58	300	0.47	1800	7.2	5.6	1.4
Jan-97	50	270	0.62	1700	7.1	11	0.38
Feb-97	50	270	0.71	1800	7.2	-5.5	0.86
Mar-97	50	300	0.55	1800	7.1	-3.0	0.80
Apr-97	48	280	0.49	1800	7.1	-7.7	1.0
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	51.4	283	0.543	1717	7.10	2.72	0.699
SD	2.75	17.1	0.0692	93.74	0.0603	11.1	0.386
Level I							
AL (upper)	59	332	0.74	1987	NA	NA	NA
Level II							
AL (upper)	62	348	0.81	2075	7.3	45	2.2
					6.9		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Tab. .. Alert Levels for Intrawell Comparisons

Well	M22-O						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	4.9	51	0.64	430	8.5	9.5	0.80
Jun-96	4.5	48	0.74	390	8.6	-4.4	0.58
Jul-96	5.1	51	0.67	380	8.6	-10	0.80
Aug-96	5.0	57	0.65	400	8.6	24	1.8
Sep-96	5.0	50	0.050	410	8.6	-18	1.1
Oct-96	5.2	53	0.65	400	8.4	19	0.50
Nov-96	5.0	48	0.64	410	8.4	-5.2	0.56
Dec-96	4.8	49	0.66	410	8.5	-1.8	0.99
Jan-97	5.0	49	0.83	400	8.3	-5.4	0.35
Feb-97	4.2	47	0.70	400	8.3	-13	0.42
Mar-97	4.6	49	0.77	400	8.4	-4.9	0.38
Apr-97	4.7	50	0.64	410	8.3	-0.45	0.95
May-97		0.59					
Jun-97							
Jul-97							
Aug-97							
Mean	4.83	50.2	0.682	403	8.46	-0.930	0.761
SD	0.287	2.69	0.0673	12.3	0.124	12.7	0.396
Level I							
AL (upper)	5.7	58	0.88	439	NA	NA	NA
Level II							
AL (upper)	5.9	60	0.94	450	8.9	47	2.3
AL (lower)					8.0		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[redacted] -- Outlier removed prior to calculating alert levels

Table 1. Alert Levels for Intrawell Comparisons

Well	M23-UBF						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	40	260	0.55	1500	6.9	0.59	1.2
Jun-96	39	250	0.64	1400	7.0	-18	1.1
Jul-96	40	260	0.61	1300	7.0	-11	0.70
Aug-96	40	300	0.59	1500	7.2	-31	1.2
Sep-96	39	240	0.49	1400	7.2	-13	0.41
Oct-96	40	260	0.61	1400	7.1	-4.9	0.60
Nov-96	41	240	0.60	1400	7.2	-17	0.43
Dec-96	39	240	0.59	1500	7.2	-5.7	0.40
Jan-97	38	240	0.79	1400	7.2	-12	0.19
Feb-97	39	230	0.82	1500	7.2	5.2	0.39
Mar-97	35	240	0.76	1300	7.2	-5.2	0.66
Apr-97	37	240	0.59	1400	7.2	-15	0.21
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	38.9	250	0.637	1417	7.13	-10.6	0.621
SD	1.62	18.6	0.100	71.77	0.107	9.58	0.357
Level I							
AL (upper)	44	304	0.93	1623	NA	NA	NA
Level II							
AL (upper)	45	321	1.0	1691	7.5	26	2.0
AL (lower)					6.7		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Table 1. Alert Levels for Intrawell Comparisons

Well	M24-O						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	12	820	0.98	1500	7.8	-0.39	2.6
Jun-96	11	820	1.1	1400	7.9	55	2.5
Jul-96	11	780	1.0	1400	7.9	-7.2	2.5
Aug-96	11	810	0.64	1400	7.9	17	2.3
Sep-96	12	810	1.3	1400	7.8	24	3.2
Oct-96	12	850	1.3	1400	7.7	-6.2	2.4
Nov-96	11	800	0.96	1400	7.9	-17	2.7
Dec-96	11	800	1.1	1400	7.8	-2.6	2.5
Jan-97	11	790	1.1	1400	7.8	-5.7	2.1
Feb-97	11	790	1.3	1400	7.7	17	2.3
Mar-97	10	790	0.94	1400	7.8	-3.8	1.7
Apr-97	11	810	0.56	1400	7.8	-12	2.2
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	11.2	806	1.02	1408	7.82	4.81	2.41
SD	0.577	18.8	0.238	28.87	0.0718	20.1	0.364
Level I							
AL (upper)	13	860	1.7	1491	NA	NA	NA
Level II							
AL (upper)	13	878	1.9	1519	8.1	81	3.8
AL (lower)					7.5		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[redacted] -- Outlier removed prior to calculating alert levels

Table 1. Alert Levels for Intrawell Comparisons

Well	M25-UBF						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	35	220	0.58	1200	7.1	0.35	0.23
Jun-96	37	230	0.59	1300	7.2	18	0.35
Jul-96	31	210	0.67	990	7.6	-5.0	0.35
Aug-96	33	220	1.0	1200	7.9	19	0.25
Sep-96	28	190	0.86	1100	7.4	-39	0.06
Oct-96	31	200	0.92	1100	7.1	-1.2	0.58
Nov-96	25	170	0.72	940	7.4	-18	-0.047
Dec-96	32	210	0.63	1200	7.2	-11	0.91
Jan-97	30	210	0.68	1200	7.2	-7.8	0.19
Feb-97	25	180	0.84	980	7.2	-5.4	0.17
Mar-97	35	240	0.52	1300	7.2	-11	0.43
Apr-97	37	250	0.57	1400	7.1	6.7	0.52
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	31.6	211	0.715	1159	7.30	-4.52	0.333
SD	4.12	23.5	0.155	141.5	0.241	15.7	0.256
Level I							
AL (upper)	43	279	1.2	1567	NA	NA	NA
Level II							
AL (upper)	47	301	1.3	1700	8.2	55	1.3
AL (lower)					6.4		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Tab. 1. Alert Levels for Intrawell Comparisons

Well	M26-O						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	0.64	66	1.9	380	8.7	0.22	1.0
Jun-96	0.43	62	1.8	350	8.6	-2.8	0.48
Jul-96	0.35	63	2.0	340	8.2	2.7	0.46
Aug-96	0.33	64	1.5	360	8.6	3.1	0.92
Sep-96	0.38	62	1.8	370	7.8	5.8	0.29
Oct-96	0.30	63	2.0	340	8.6	-0.16	0.51
Nov-96	0.31	61	1.6	330	8.6	-0.45	0.56
Dec-96	0.29	62	1.7	370	8.6	-5.8	0.29
Jan-97	0.26	60	2.0	340	8.4	-4.3	1.0
Feb-97	0.23	61	2.0	340	8.4	-10	0.090
Mar-97	0.29	60	1.9	280	8.6	-3.6	2.0
Apr-97	0.27	60	1.6	360	8.5	-2.3	0.55
May-97	0.23						
Jun-97							
Jul-97							
Aug-97							
Mean	0.306	62.0	1.82	347	8.47	-1.49	0.685
SD	0.0595	1.81	0.180	26.1	0.250	4.34	0.511
Level I							
AL (upper)	0.48	67	2.3	422	NA	NA	NA
Level II							
AL (upper)	0.53	69	2.5	446	9.4	15	2.6
AL (lower)					7.5		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[REDACTED] -- Outlier removed prior to calculating alert levels

TaL 1. Alert Levels for Intrawell Comparisons

Well	M27-LBF						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	22	110	0.41	1100	7.9	1.2	1.2
Jun-96	26	120	0.38	980	8.0	-6.9	1.4
Jul-96	27	110	0.43	940	7.8	11	0.94
Aug-96	29	100	0.23	970	7.9	6.2	1.0
Sep-96	30	100	0.37	1200	8.7	21	1.2
Oct-96	31	110	0.38	1000	7.8	-3.3	0.65
Nov-96	30	100	0.30	1100	7.6	9.3	1.8
Dec-96	29	110	0.33	970	7.8	-8.1	1.7
Jan-97	30	100	0.44	1100	7.6	-3.9	1.6
Feb-97	29	110	0.38	990	7.7	-8.8	1.1
Mar-97	26	100	0.32	1000	7.7	-0.66	1.2
Apr-97	28	99	0.30	1100	7.6	-16	2.2
May-97					7.6		
Jun-97							
Jul-97							
Aug-97							
Mean	28.1	106	0.356	1038	7.75	0.0708	1.33
SD	2.50	6.77	0.0614	79.21	0.138	10.3	0.431
Level I							
AL (upper)	35	125	0.53	1266	NA	NA	NA
Level II							
AL (upper)	38	132	0.59	1340	8.3	39	3.0
AL (lower)					7.2		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Tat. 1. Alert Levels for Intrawell Comparisons

Well	M28-LBF						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	1.3	53	0.76	400	9.4	16	0.38
Jun-96	1.5	53	0.78	370	9.2	-7.6	0.55
Jul-96	1.5	49	0.89	360	8.8	0.46	0.45
Aug-96	1.3	49	0.65	380	8.8	-18	1.2
Sep-96	1.4	48	0.83	400	8.9	-8.1	0.42
Oct-96	1.5	48	0.91	360	8.7	3.7	0.69
Nov-96	1.4	48	0.70	370	8.5	-11	0.88
Dec-96	1.5	46	0.79	370	8.7	-9.5	0.21
Jan-97	1.4	46	0.94	350	8.5	-2.6	0.87
Feb-97	1.5	50	0.88	360	8.5	-7.0	0.27
Mar-97	1.4	46	0.74	370	8.6	-8.6	0.71
Apr-97	1.5	45	0.69	370	8.5	-2.3	1.1
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	1.43	48.4	0.797	372	8.76	-4.48	0.644
SD	0.0778	2.61	0.0940	15.3	0.291	8.69	0.319
Level I							
AL (upper)	1.7	56	1.1	416	NA	NA	NA
Level II							
AL (upper)	1.7	58	1.2	430	9.9	29	1.9
					7.6		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Tab. 1. Alert Levels for Intrawell Comparisons

Well	M29-UBF						
	Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	44	240	0.62	1600	7.1	4.9	0.54
Jun-96	48	260	0.60	1500	7.2	-12	0.65
Jul-96	45	280	0.66	1600	7.0	8.1	0.61
Aug-96	48	270	0.42	1600	7.1	1.6	0.47
Sep-96	48	260	0.57	1700	7.2	-21	0.66
Oct-96	51	270	0.63	1700	7.1	-9.7	0.76
Nov-96	49	260	0.50	1700	7.1	-11	0.76
Dec-96	43	260	0.59	1500	7.1	-18	0.68
Jan-97	47	260	0.69	1700	7.1	-0.81	0.56
Feb-97	50	270	0.65	1700	7.1	-27	0.22
Mar-97	44	260	0.50	1600	7.2	-10	0.81
Apr-97	45	250	0.51	1700	7.2	-10	0.54
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	46.8	262	0.578	1633	7.12	-8.84	0.605
SD	2.59	10.3	0.0805	77.85	0.0622	10.7	0.158
Level I							
AL (upper)	54	291	0.81	1858	NA	NA	NA
Level II							
AL (upper)	57	301	0.89	1931	7.4	32	1.2
					6.9		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Tab. I. Alert Levels for Intrawell Comparisons

Well	M30-O						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	11	62	0.66	490	7.4	-11	0.99
Jun-96	10	60	0.82	510	7.3	12	1.5
Jul-96	11	62	0.69	470	7.1	-1.4	1.7
Aug-96	11	60	0.66	490	7.6	13	1.0
Sep-96	11	60	0.77	510	7.5	-0.31	1.7
Oct-96	11	61	0.99	480	7.4	-3.8	1.2
Nov-96	10	59	0.65	460	7.5	0.74	1.8
Dec-96	10	60	0.74	480	7.4	1.6	53
Jan-97	9.9	59	0.84	480	7.4	-4.1	1.6
Feb-97	11	59	0.83	490	7.4	4.8	1.2
Mar-97	9.6	59	0.71	490	7.4	-4.1	1.6
Apr-97	10	59	0.65	500	7.4	-5.7	1.7
May-97							1.2
Jun-97							
Jul-97							
Aug-97							
Mean	10.5	60.0	0.751	488	7.40	0.159	1.42
SD	0.576	1.13	0.104	14.8	0.121	7.16	0.292
Level I						-	
AL (upper)	12	63	1.1	530	NA	NA	NA
Level II							
AL (upper)	13	64	1.1	544	7.9	27	2.5
AL (lower)					6.9		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Tab. 1. Alert Levels for Intrawell Comparisons

Well	M31-LBF						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	32	180	0.57	1100	7.2	4.9	0.56
Jun-96	31	180	0.76	1100	7.1	-7.0	0.33
Jul-96	29	200	0.66	990	7.0	12	0.75
Aug-96	29	180	0.62	990	7.3	3.0	0.21
Sep-96	28	180	0.71	1100	7.4	0.090	0.37
Oct-96	29	190	0.86	1000	7.2	-7.2	0.35
Nov-96	27	180	0.69	990	7.3	7.5	1.9
Dec-96	28	180	0.74	990	7.3	-26	0.78
Jan-97	28	180	0.80	990	7.3	-5.0	0.35
Feb-97	28	180	0.80	1000	7.2	11	0.080
Mar-97	25	180	0.65	1000	7.3	9.1	0.47
Apr-97	24	180	0.63	1000	7.3	2.3	0.27
May-97							0.35
Jun-97							
Jul-97							
Aug-97							
Mean	28.2	183	0.708	1021	7.24	0.361	0.406
SD	2.21	6.22	0.0867	47.95	0.108	10.6	0.206
Level I							
AL (upper)	35	200	0.96	1159	NA	NA	NA
Level II							
AL (upper)	37	206	1.0	1204	7.7	41	1.2
AL (lower)					6.8		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[REDACTED] -- Outlier removed prior to calculating alert levels

Tab. I. Alert Levels for Intrawell Comparisons

Well	M32-UBF						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	53	280	0.54	1600	7.2	4.2	0.76
Jun-96	52	300	0.51	1600	7.1	-6.8	1.0
Jul-96	54	300	0.72	1600	7.1	27	0.63
Aug-96	51	290	0.55	1600	7.2	19	0.59
Sep-96	56	300	0.57	1700	7.1	0.70	1.6
Oct-96	53	310	0.62	1800	7.2	0.42	0.94
Nov-96	53	300	0.58	1700	7.3	-7.6	0.91
Dec-96	51	300	0.64	1600	7.2	-17	0.15
Jan-97	50	290	0.60	1800	7.1	-8.9	0.35
Feb-97	54	280	0.78	1700	7.2	-18	0.41
Mar-97	45	280	0.72	1500	7.2	-15	0.67
Apr-97	46	270	0.57	1600	7.1	0.80	0.58
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	51.5	292	0.617	1650	7.17	-1.69	0.716
SD	3.23	11.9	0.0833	90.45	0.0651	13.8	0.369
Level I							
AL (upper)	61	326	0.86	1911	NA	NA	NA
Level II							
AL (upper)	64	337	0.93	1996	7.4	51	2.1
AL (lower)					6.9		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Table 1. Alert Levels for Intrawell Comparisons

Well	M33-UBF						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96							
Feb-96							
Mar-96							
Apr-96							
May-96	46	210	0.70	1400	7.2	68	0.63
Jun-96	42	220	0.65	1400	7.2	8.5	0.61
Jul-96	48	250	0.91	1500	7.1	-17	0.74
Aug-96	43	230	0.81	1400	7.3	30	0.28
Sep-96	47	240	0.81	1400	7.2	1.3	0.74
Oct-96	44	240	0.77	1500	7.1	-10	0.62
Nov-96	46	270	0.68	1600	7.3	-4.4	0.68
Dec-96	45	260	0.75	1500	7.2	-13	0.81
Jan-97	46	260	0.73	1500	7.1	-11	0.43
Feb-97	45	260	0.89	1600	7.2	-0.89	0.53
Mar-97	46	260	0.74	1500	7.1	5.1	1.2
Apr-97	44	260	0.66	1500	7.1	-12	0.54
May-97						-8.3	
Jun-97							
Jul-97							
Aug-97							
Mean	45.2	247	0.758	1483	7.17	-2.72	0.653
SD	1.70	18.7	0.0842	71.77	0.0754	13.0	0.230
Level I							
AL (upper)	50	301	1.0	1690	NA	NA	NA
Level II							
AL (upper)	52	318	1.1	1758	7.5	47	1.5
AL (lower)					6.9		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Table 1. Alert Levels for Intrawell Comparisons

Well	P19-1-O						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96	7.6	62	1.0	480	8.1	16	1.2
Feb-96	7.6	64	0.82	450	6.3	-20	0.93
Mar-96	7.6	60	1.3	460	7.4	14	1.3
Apr-96	7.6	58	1.2	450	7.3	-2.6	1.1
May-96	7.4	59	1.1	450	7.3	-0.47	0.89
Jun-96	7.5	76	1.3	450	7.7	-15	0.92
Jul-96	6.9	63	1.5	440	7.6	17	0.79
Aug-96	7.4	59	1.1	460	7.8	4.7	0.79
Sep-96	7.4	63	1.7	460	7.8	-23	1.0
Oct-96	8.9	59	1.4	460	7.5	-11	1.3
Nov-96	7.4	60	1.2	460	7.7	-8.7	0.87
Dec-96	7.3	60	1.3	470	7.6	-2.7	1.0
Jan-97							
Feb-97							
Mar-97	6.4	60			7.6		
Apr-97							
May-97		6.8					
Jun-97							
Jul-97							
Aug-97							
Mean	7.38	60.6	1.24	458	7.62	-2.58	1.01
SD	0.267	1.93	0.232	10.6	0.229	13.8	0.172
Level I							
AL (upper)	8.1	66	1.9	488	NA	NA	NA
Level II							
AL (upper)	8.4	68	2.1	498	8.5	50	1.7
AL (lower)					6.7		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Table 1. Alert Levels for Intrawell Comparisons

Well	O19-GL						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96	10	65	0.49	550	7.8	2.3	1.4
Feb-96	9.1	60	0.44	430	6.4	21	1.1
Mar-96	9.4	58	0.72	480	7.6	14	1.2
Apr-96	12	75	0.58	550	7.4	-5.2	0.86
May-96	10	66	0.59	470	7.5	6.6	0.74
Jun-96	10	60	0.60	450	7.8	-7.2	0.67
Jul-96	9.1	60	0.68	450	7.6	-1.2	0.83
Aug-96	9.3	55	0.48	460	7.8	0.47	1.0
Sep-96	10	58	0.70	470	7.9	-16	0.77
Oct-96	10	57	0.76	460	7.6	-12	0.40
Nov-96	10	58	0.54	470	7.8	-9.8	0.67
Dec-96	10	57	0.58	480	7.7	-3.3	0.91
Jan-97							
Feb-97							
Mar-97	9.5	58		470	7.7		
Apr-97							
May-97				470			
Jun-97							
Jul-97							
Aug-97							
Mean	9.70	59.3	0.597	463	7.68	-0.922	0.872
SD	0.386	3.23	0.101	14.4	0.147	10.6	0.256
Level I							
AL (upper)	11	69	0.89	505	NA	NA	NA
Level II							
AL (upper)	11	72	0.98	518	8.2	40	1.8
AL (lower)					7.1		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

Tab I. Alert Levels for Intrawell Comparisons

Well	P49-O						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96	3.8	120	0.40	510	6.8	17	2.2
Feb-96	4.1	110	0.83	490	7.3	25	1.3
Mar-96	3.8	110	0.99	480	7.3	8.5	1.7
Apr-96	3.6	100	1.1	500	7.2	-4.1	1.7
May-96	3.8	110	1.1	500	7.4	19	1.5
Jun-96	3.6	110	0.85	490	7.6	4.6	1.9
Jul-96	3.7	110	1.0	460	7.4	13	2.1
Aug-96	3.8	110	0.88	480	7.7	31	0.98
Sep-96	3.7	110	1.0	500	7.7	4.6	1.3
Oct-96	3.3	110	1.0	480	7.7	5.2	1.4
Nov-96	3.5	100	0.91	470	7.7	18	1.7
Dec-96	3.4	100	1.0	480	7.8	5.8	1.3
Jan-97							
Feb-97							
Mar-97			1.3				
Apr-97							
May-97							
Jun-97							
Jul-97							
Aug-97							
Mean	3.67	108	0.997	487	7.47	12.3	1.59
SD	0.214	5.77	0.129	14.4	0.290	10.0	0.366
Level I							
AL (upper)	4.3	125	1.4	528	NA	NA	NA
Level II							
AL (upper)	4.5	130	1.5	542	8.6	51	3.0
AL (lower)					6.4		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[REDACTED] -- Outlier removed prior to calculating alert levels

Table .. Alert Levels for Intrawell Comparisons

Well	O49-GL						
Analyte (units)	Mg (mg/l)	SO ₄ (mg/l)	F (mg/l)	TDS (mg/l)	pH (S.U.)	Ad. Alpha (pCi/l)	Radium (pCi/l)
Sample Date							
Jun-95							
Jul-95							
Aug-95							
Sep-95							
Oct-95							
Nov-95							
Dec-95							
Jan-96	7.6	55*	0.44	510	7.0	0.16	0.80
Feb-96	8.0	51	0.38	450	7.5	4.8	0.33
Mar-96	7.4	51	0.45	480	7.6	-8.2	0.32
Apr-96	7.4	49	0.53	460	7.4	7.4	0.50
May-96	7.0	50	0.46	470	7.3	30	0.24
Jun-96	7.5	73	0.43	460	7.7	-5.6	0.54
Jul-96	7.6	50	0.44	430	7.5	0.79	0.90
Aug-96	7.4	48	0.39	470	7.9	22	0.21
Sep-96	7.8	48	0.51	460	7.8	-45	1.2
Oct-96	6.8	48	0.45	460	7.8	12	0.38
Nov-96	7.4	52	0.46	480	7.9	0.41	0.34
Dec-96	9.2	78	0.46	560	7.8	-12	1.1
Jan-97							
Feb-97							
Mar-97	21	210		2200			
Apr-97							
May-97	26	260		1300			
Jun-97	23	220		1100			
Jul-97							
Aug-97	8.6	72		510			
Mean	7.54	55.8	0.450	470	7.60	0.538	0.574
SD	0.460	11.3	0.0420	23.0	0.273	18.8	0.348
Level I							
AL (upper)	8.9	88	0.57	536	NA	NA	NA
Level II							
AL (upper)	9.3	99	0.61	558	8.6	72	1.9
AL (lower)					6.6		

NA -- Not applicable

SD -- Standard deviation

AL -- Alert level

ID -- Insufficient number of data points

Ad. Alpha -- Adjusted alpha calculated as: gross alpha - total uranium

Radium -- Radium calculated as: radium 226 + radium 228

2.88 -- Level I prediction limit factor

3.82 -- Level II prediction limit factor

[] -- Outlier removed prior to calculating alert levels

* -- Value not used because 12-month window moved forward to reflect changing water quality.

TABLE 2
ALERT LEVELS FOR INTERWELL COMPARISONS

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Al	Sb	As	Ba	Be	Cd
M1-GL	Jul-95	<0.1	<0.005	<0.002	0.023	<0.001	<0.005
	Aug-95	<0.1	<0.005	<0.002	0.022	<0.001	<0.005
	Sept-95	<0.1	<0.005	0.0030	0.024	<0.001	<0.005
	Oct-95	<0.1	<0.005	<0.002	0.019	<0.001	<0.005
	Nov-95	<0.1	<0.005	<0.002	0.022	<0.001	<0.005
	Dec-95	<0.1	<0.005	0.0023	0.023	<0.001	<0.005
	Jan-96	0.44	<0.005	<0.002	0.021	<0.001	<0.005
	Feb-96	<0.1	<0.005	0.0034	0.024	<0.001	<0.005
	Mar-96	<0.1	<0.005	<0.002	0.021	<0.001	<0.005
	Apr-96	<0.1	<0.005	<0.002	0.021	<0.001	<0.005
	May-96	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	Jun-96	<0.1	<0.005	<0.002	0.023	<0.001	<0.005
M2-GU	Jun-95	<0.1	<0.005	0.0025	0.046	<0.001	<0.005
	Jul-95	<0.1	<0.005	<0.002	0.043	0.0014	<0.005
	Aug-95	<0.1	<0.005	0.0036	0.041	<0.001	0.0079
	Sept-95	<0.1	<0.005	0.0030	0.047	<0.001	<0.005
	Oct-95	<0.1	<0.005	0.0028	0.048	<0.001	<0.005
	Nov-95	<0.1	0.0071	0.0027	0.042	<0.001	<0.005
	Dec-95	<0.1	<0.005	<0.002	0.045	<0.001	<0.005
	Jan-96	<0.1	<0.005	<0.002	0.040	<0.001	<0.005
	Feb-96	<0.1	<0.005	0.0030	0.045	<0.001	<0.005
	Mar-96	<0.1	<0.005	0.0023	0.039	<0.001	<0.005
	Apr-96	<0.1	<0.005	0.0022	0.039	<0.001	<0.005
	May-96	<0.1	<0.005	<0.002	0.041	<0.001	<0.005
M3-GL	Jun-95	<0.1	<0.005	<0.002	0.027	<0.001	<0.005
	Jul-95	<0.1	<0.005	<0.002	0.027	0.0020	<0.005
	Aug-95	<0.1	<0.005	0.0024	0.024	<0.001	<0.005
	Sept-95	<0.1	<0.005	<0.002	0.025	<0.001	<0.005
	Oct-95	<0.1	<0.005	<0.002	0.028	<0.001	<0.005
	Nov-95	<0.1	<0.005	<0.002	0.022	<0.001	<0.005
	Dec-95	<0.1	<0.005	<0.002	0.025	<0.001	<0.005
	Jan-96	<0.1	<0.005	<0.002	0.024	<0.001	<0.005
	Feb-96	<0.1	<0.005	<0.002	0.026	<0.001	<0.005
	Mar-96	<0.1	<0.005	<0.002	0.025	<0.001	<0.005
	Apr-96	<0.1	<0.005	<0.002	0.024	<0.001	<0.005
	May-96	<0.1	<0.005	<0.002	0.023	<0.001	<0.005
M4-O	Jun-95	<0.1	<0.005	<0.002	0.015	<0.001	<0.005
	Jul-95	<0.1	<0.005	<0.002	0.016	0.0022	<0.005
	Aug-95	<0.1	<0.005	0.0029	0.011	<0.001	0.0082
	Sept-95	<0.1	<0.005	<0.002	0.019	<0.001	<0.005
	Oct-95	<0.1	<0.005	<0.002	0.021	<0.001	<0.005
	Nov-95	<0.1	<0.005	<0.002	0.022	<0.001	<0.005
	Dec-95	<0.1	<0.005	<0.002	0.019	<0.001	<0.005
	Jan-96	<0.1	<0.005	<0.002	0.014	<0.001	<0.005
	Feb-96	<0.1	<0.005	<0.002	0.012	<0.001	<0.005
	Mar-96	<0.1	<0.005	<0.002	0.012	<0.001	<0.005
	Apr-96	<0.1	<0.005	<0.002	0.010	<0.001	<0.005
	May-96	<0.1	<0.005	<0.002	0.009	<0.001	<0.005

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Al	Sb	As	Ba	Be	Cd
M6-GU	Jul-95	<0.1	<0.005	<0.002	0.0065	<0.001	<0.005
	Aug-95	<0.1	<0.005	<0.002	0.0069	<0.001	<0.005
	Sept-95	<0.1	<0.005	<0.002	0.0077	<0.001	<0.005
	Oct-95	<0.1	<0.005	<0.002	0.0082	<0.001	<0.005
	Nov-95	<0.1	<0.005	0.0031	0.0082	<0.001	<0.005
	Dec-95	0.13	<0.005	<0.002	0.0086	<0.001	<0.005
	Jan-96	<0.1	<0.005	<0.002	0.0057	<0.001	<0.005
	Feb-96	<0.1	<0.005	<0.002	0.0071	<0.001	<0.005
	Mar-96	<0.1	<0.005	<0.002	0.0079	<0.001	<0.005
	Apr-96	<0.1	<0.005	<0.002	0.0077	<0.001	<0.005
	May-96	<0.1	<0.005	<0.002	0.0064	<0.001	<0.005
	Jun-96	<0.1	<0.005	<0.002	<0.005	<0.001	<0.005
M7-GL	Aug-95	<0.1	<0.005	<0.002	0.013	<0.001	<0.005
	Sept-95	0.18	<0.005	<0.002	0.0080	<0.001	<0.005
	Oct-95	0.17	<0.005	0.0026	0.018	<0.001	<0.005
	Nov-95	<0.1	<0.005	<0.002	0.0069	<0.001	<0.005
	Dec-95	0.12	<0.005	<0.002	0.010	<0.001	<0.005
	Jan-96	<0.1	<0.005	<0.002	0.0093	<0.001	<0.005
	Feb-96	<0.1	<0.005	<0.002	0.0094	<0.001	<0.005
	Mar-96	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	Apr-96	<0.1	<0.005	<0.002	0.0090	<0.001	<0.005
	May-96	<0.1	<0.005	<0.002	0.0087	<0.001	<0.005
	Jun-96	<0.1	<0.005	0.0030	0.013	<0.001	<0.005
	Jul-96	<0.1	<0.005	0.0046	0.014	<0.001	0.0073
M8-O	Jul-95	<0.1	<0.005	<0.002	0.0072	<0.001	<0.005
	Aug-95	<0.1	<0.005	<0.002	0.0052	<0.001	<0.005
	Sept-95	<0.1	<0.005	<0.002	<0.005	<0.001	<0.005
	Oct-95	<0.1	<0.005	<0.002	<0.005	<0.001	<0.005
	Nov-95	<0.1	<0.005	<0.002	<0.005	<0.001	<0.005
	Dec-95	0.14	<0.005	<0.002	<0.005	<0.001	<0.005
	Jan-96	<0.1	<0.005	<0.002	<0.005	<0.001	<0.005
	Feb-96	<0.1	<0.005	<0.002	<0.005	<0.001	<0.005
	Mar-96	<0.1	<0.005	<0.002	<0.005	<0.001	<0.005
	Apr-96	<0.1	<0.005	<0.002	<0.005	<0.001	<0.005
	May-96	<0.1	<0.005	<0.002	<0.005	<0.001	<0.005
	Jun-96	<0.1	<0.005	<0.002	0.0078	<0.001	<0.005
M14-GL	Jul-95	<0.1	<0.005	<0.002	0.021	<0.001	<0.005
	Aug-95	<0.1	<0.005	0.0031	0.019	<0.001	<0.005
	Sept-95	<0.1	<0.005	<0.002	0.019	<0.001	<0.005
	Oct-95	<0.1	<0.005	<0.002	0.017	<0.001	<0.005
	Nov-95	<0.1	<0.005	<0.002	0.019	<0.001	<0.005
	Dec-95	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	Jan-96	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	Feb-96	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	Mar-96	<0.1	<0.005	<0.002	0.022	<0.001	<0.005
	Apr-96	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	May-96	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	Jun-96	<0.1	0.0051	<0.002	0.021	<0.001	<0.005

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Al	Sb	As	Ba	Be	Cd
M15-GU	Jul-95	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	Aug-95	<0.1	<0.005	0.0030	0.0072	<0.001	<0.005
	Sept-95	<0.1	<0.005	<0.002	0.0082	<0.001	<0.005
	Oct-95	<0.1	<0.005	<0.002	0.0067	<0.001	<0.005
	Nov-95	<0.1	<0.005	<0.002	0.0058	<0.001	<0.005
	Dec-95	<0.1	<0.005	<0.002	0.0074	<0.001	<0.005
	Jan-96	<0.1	<0.005	<0.002	0.0081	<0.001	0.0091
	Feb-96	<0.1	<0.005	0.0043	0.011	<0.001	<0.005
	Mar-96	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	Apr-96	<0.1	<0.005	<0.002	0.0081	<0.001	<0.005
	May-96	<0.1	<0.005	<0.002	0.013	<0.001	<0.005
	Jun-96	<0.1	0.0052	<0.002	0.010	<0.001	<0.005
M16-GU	Jul-95	<0.1	<0.005	<0.002	0.014	<0.001	<0.005
	Aug-95	<0.1	<0.005	<0.002	0.0089	<0.001	<0.005
	Sept-95	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	Oct-95	0.27	<0.005	<0.002	0.012	<0.001	<0.005
	Nov-95	<0.1	<0.005	<0.002	0.0098	<0.001	<0.005
	Dec-95	<0.1	<0.005	<0.002	0.010	<0.001	<0.005
	Jan-96	<0.1	<0.005	<0.002	0.010	<0.001	<0.005
	Feb-96	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	Mar-96	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	Apr-96	<0.1	<0.005	<0.002	0.0085	<0.001	<0.005
	May-96	<0.1	<0.005	<0.002	0.0079	<0.001	<0.005
	Jun-96	<0.1	<0.005	<0.002	0.0098	<0.001	<0.005
M17-GL	05 29 96	<0.1	<0.005	<0.002	0.047	<0.001	<0.005
	06 13 96	<0.1	<0.005	<0.002	0.045	<0.001	<0.005
	07 11 96	<0.1	<0.005	0.0022	0.038	<0.001	<0.005
	08 22 96	0.11	<0.005	<0.002	0.038	<0.001	<0.005
	09 11 96	<0.1	<0.005	<0.002	0.027	<0.001	<0.005
	10 10 96	<0.1	<0.005	<0.002	0.024	<0.001	<0.005
	11 14 96	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	12 19 96	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	01 23 97	<0.1	<0.005	<0.002	0.016	<0.001	<0.005
	02 12 97	<0.1	<0.005	<0.002	0.014	<0.001	<0.005
	03 26 97	<0.1	<0.005	<0.002	0.017	<0.001	<0.005
	04 16 97	<0.1	<0.005	<0.002	0.016	<0.001	<0.005
M18-GU	Jul-95	<0.1	<0.005	<0.002	0.043	<0.001	<0.005
	Aug-95	<0.1	<0.005	<0.002	0.043	<0.001	<0.005
	Sept-95	<0.1	<0.005	<0.002	0.046	<0.001	<0.005
	Oct-95	<0.1	<0.005	<0.002	0.039	<0.001	<0.005
	Nov-95	<0.1	<0.005	<0.002	0.043	<0.001	<0.005
	Dec-95	<0.1	<0.005	<0.002	0.045	<0.001	<0.005
	Jan-96	<0.1	<0.005	<0.002	0.041	<0.001	<0.005
	Feb-96	<0.1	<0.005	<0.002	0.043	<0.001	<0.005
	Mar-96	<0.1	<0.005	<0.002	0.042	<0.001	<0.005
	Apr-96	<0.1	<0.005	<0.002	0.041	<0.001	<0.005
	May-96	<0.1	<0.005	<0.002	0.040	<0.001	<0.005
	Jun-96	<0.1	<0.005	<0.002	0.044	<0.001	<0.005

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Al	Sb	As	Ba	Be	Cd
M19-LBF	05 09 96	<0.1	<0.005	<0.002	0.037	<0.001	<0.005
	06 12 96	<0.1	<0.005	<0.002	0.045	<0.001	<0.005
	07 10 96	<0.1	<0.005	0.0027	0.044	<0.001	<0.005
	08 07 96	<0.1	<0.005	<0.002	0.036	<0.001	<0.005
	09 10 96	<0.1	<0.005	<0.002	0.041	<0.001	<0.005
	10 08 96	<0.1	<0.005	<0.002	0.042	<0.001	<0.005
	11 12 96	<0.1	<0.005	<0.002	0.043	<0.001	<0.005
	12 17 96	<0.1	<0.005	<0.002	0.042	<0.001	<0.005
	01 21 97	<0.1	<0.005	0.0023	0.043	<0.001	<0.005
	02 10 97	<0.1	<0.005	<0.002	0.044	<0.001	<0.005
	03 24 97	<0.1	<0.005	<0.002	0.044	<0.001	<0.005
	04 14 97	<0.1	<0.005	<0.002	0.042	<0.001	<0.005
M20-O	05 09 96	<0.1	<0.005	<0.002	0.052	<0.001	<0.005
	06 12 96	<0.1	<0.005	<0.002	0.032	<0.001	<0.005
	07 10 96	<0.1	<0.005	<0.002	0.021	<0.001	0.0057
	08 22 96	<0.1	<0.005	<0.002	0.0082	<0.001	<0.005
	09 11 96	<0.1	<0.005	<0.002	0.016	<0.001	<0.005
	10 10 96	<0.1	<0.005	<0.002	0.013	<0.001	<0.005
	11 14 96	<0.1	<0.005	<0.002	0.013	<0.001	<0.005
	12 19 96	<0.1	<0.005	<0.002	0.016	<0.001	<0.005
	01 23 97	<0.1	<0.005	<0.002	0.013	<0.001	<0.005
	02 12 97	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	03 26 97	<0.1	<0.005	<0.002	0.014	<0.001	<0.005
	04 16 97	<0.1	<0.005	<0.002	0.013	<0.001	<0.005
M21-UBF	05 09 96	<0.1	0.0064	<0.002	0.11	<0.001	<0.005
	06 12 96	<0.1	<0.005	<0.002	0.12	<0.001	<0.005
	07 10 96	<0.1	<0.005	0.0025	0.11	<0.001	<0.005
	08 07 96	<0.1	<0.005	<0.002	0.12	<0.001	<0.005
	09 10 96	<0.1	<0.005	<0.002	0.12	<0.001	<0.005
	10 08 96	<0.1	<0.005	<0.002	0.11	<0.001	<0.005
	11 12 96	<0.1	<0.005	<0.002	0.11	<0.001	0.0055
	12 17 96	<0.1	<0.005	<0.002	0.13	<0.001	<0.005
	01 21 97	<0.1	<0.005	0.0023	0.11	<0.001	<0.005
	02 10 97	<0.1	<0.005	<0.002	0.11	<0.001	<0.005
	03 24 97	<0.1	<0.005	<0.002	0.12	<0.001	<0.005
	04 14 97	<0.1	<0.005	<0.002	0.11	<0.001	<0.005
M22-O	05 28 96	<0.1	<0.005	<0.002	0.028	<0.001	<0.005
	06 17 96	<0.1	0.0065	<0.002	0.022	<0.001	<0.005
	07 18 96	<0.1	<0.005	<0.002	0.021	<0.001	0.018
	08 07 96	0.23	<0.005	<0.002	0.014	<0.001	<0.005
	09 10 96	<0.1	<0.005	<0.002	0.014	<0.001	<0.005
	10 08 96	<0.1	<0.005	<0.002	0.014	<0.001	<0.005
	11 12 96	<0.1	<0.005	<0.002	0.013	<0.001	0.0078
	12 17 96	<0.1	<0.005	<0.002	0.012	<0.001	<0.005
	01 21 97	<0.1	<0.005	<0.002	0.012	<0.001	<0.005
	02 10 97	<0.1	<0.005	<0.002	0.012	<0.001	0.0077
	03 24 97	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	04 14 97	<0.1	<0.005	<0.002	0.010	<0.001	<0.005

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Al	Sb	As	Ba	Be	Cd
M23-UBF	05 23 96	<0.1	<0.005	<0.002	0.10	<0.001	<0.005
	06 17 96	<0.1	<0.005	<0.002	0.096	<0.001	<0.005
	07 18 96	<0.1	<0.005	<0.002	0.091	<0.001	0.020
	08 07 96	<0.1	<0.005	<0.002	0.089	<0.001	<0.005
	09 10 96	<0.1	<0.005	<0.002	0.086	<0.001	<0.005
	10 08 96	<0.1	<0.005	<0.002	0.087	<0.001	<0.005
	11 12 96	<0.1	<0.005	<0.002	0.087	<0.001	0.0097
	12 17 96	<0.1	<0.005	<0.002	0.090	<0.001	<0.005
	01 21 97	<0.1	<0.005	0.0038	0.091	<0.001	<0.005
	02 10 97	<0.1	<0.005	<0.002	0.091	<0.001	<0.005
	03 24 97	<0.1	<0.005	<0.002	0.084	<0.001	<0.005
	04 14 97	<0.1	<0.005	<0.002	0.090	<0.001	<0.005
M24-O	05 28 96	<0.1	<0.005	<0.002	0.013	<0.001	<0.005
	06 13 96	<0.1	<0.005	<0.002	0.010	<0.001	<0.005
	07 11 96	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	08 22 96	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	09 11 96	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	10 10 96	<0.1	<0.005	<0.002	0.0091	<0.001	<0.005
	11 14 96	<0.1	<0.005	<0.002	0.0078	<0.001	<0.005
	12 19 96	<0.1	<0.005	<0.002	0.010	<0.001	<0.005
	01 23 97	<0.1	<0.005	<0.002	0.0085	<0.001	<0.005
	02 12 97	<0.1	<0.005	<0.002	0.0074	<0.001	<0.005
	03 26 97	<0.1	<0.005	<0.002	0.0087	<0.001	<0.005
	04 16 97	<0.1	<0.005	<0.002	0.0099	<0.001	<0.005
M25-UBF	05 28 96	<0.1	<0.005	<0.002	0.085	<0.001	<0.005
	06 13 96	<0.1	<0.005	<0.002	0.087	<0.001	<0.005
	07 11 96	<0.1	<0.005	<0.002	0.071	<0.001	<0.005
	08 22 96	0.12	<0.005	<0.002	0.075	<0.001	<0.005
	09 11 96	<0.1	<0.005	<0.002	0.062	<0.001	<0.005
	10 10 96	<0.1	<0.005	<0.002	0.068	<0.001	<0.005
	11 14 96	<0.1	<0.005	<0.002	0.054	<0.001	<0.005
	12 19 96	<0.1	<0.005	<0.002	0.075	<0.001	<0.005
	01 23 97	<0.1	<0.005	<0.002	0.067	<0.001	<0.005
	02 12 97	<0.1	<0.005	<0.002	0.054	<0.001	<0.005
	03 26 97	<0.1	<0.005	<0.002	0.085	<0.001	<0.005
	04 16 97	<0.1	<0.005	<0.002	0.090	<0.001	<0.005
M26-O	05 15 96	<0.1	0.0056	<0.002	0.015	<0.001	<0.005
	06 14 96	<0.1	<0.005	<0.002	0.014	<0.001	<0.005
	07 16 96	<0.1	<0.005	<0.002	0.012	<0.001	<0.005
	08 08 96	<0.1	<0.005	<0.002	0.0065	<0.001	<0.005
	09 16 96	<0.1	<0.005	<0.002	0.0096	<0.001	<0.005
	10 09 96	<0.1	<0.005	<0.002	0.0079	<0.001	<0.005
	11 13 96	<0.1	<0.005	<0.002	0.0081	<0.001	<0.005
	12 18 96	<0.1	<0.005	<0.002	0.0089	<0.001	<0.005
	01 22 97	<0.1	<0.005	<0.002	0.0067	<0.001	<0.005
	02 11 97	<0.1	<0.005	0.0028	0.0054	<0.001	<0.005
	03 25 97	<0.1	<0.005	0.0031	0.0068	<0.001	<0.005
	04 15 97	<0.1	<0.005	<0.002	0.0063	<0.001	<0.005

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Al	Sb	As	Ba	Be	Cd
M27-LBF	05 15 96	<0.1	<0.005	0.0031	0.056	<0.001	<0.005
	06 14 96	<0.1	<0.005	0.0021	0.050	<0.001	<0.005
	07 16 96	<0.1	<0.005	<0.002	0.043	<0.001	<0.005
	08 08 96	<0.1	<0.005	0.0021	0.035	<0.001	<0.005
	09 16 96	<0.1	<0.005	<0.002	0.037	<0.001	<0.005
	10 09 96	<0.1	<0.005	<0.002	0.037	<0.001	<0.005
	11 13 96	<0.1	<0.005	<0.002	0.036	<0.001	<0.005
	12 18 96	<0.1	<0.005	<0.002	0.035	<0.001	<0.005
	01 22 97	<0.1	<0.005	<0.002	0.033	<0.001	<0.005
	02 11 97	<0.1	<0.005	0.0023	0.031	<0.001	<0.005
	03 25 97	<0.1	<0.005	<0.002	0.030	<0.001	<0.005
	04 15 97	<0.1	<0.005	<0.002	0.032	<0.001	<0.005
M28-LBF	05 15 96	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	06 14 96	<0.1	<0.005	<0.002	0.021	<0.001	<0.005
	07 16 96	<0.1	<0.005	<0.002	0.019	<0.001	<0.005
	08 08 96	<0.1	<0.005	<0.002	0.013	<0.001	<0.005
	09 16 96	<0.1	<0.005	<0.002	0.017	<0.001	<0.005
	10 09 96	<0.1	<0.005	<0.002	0.015	<0.001	<0.005
	11 13 96	<0.1	<0.005	<0.002	0.014	<0.001	<0.005
	12 18 96	<0.1	<0.005	<0.002	0.014	<0.001	<0.005
	01 22 97	<0.1	<0.005	0.0021	0.013	<0.001	<0.005
	02 11 97	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	03 25 97	<0.1	<0.005	<0.002	0.012	<0.001	<0.005
	04 15 97	<0.1	<0.005	<0.002	0.010	<0.001	<0.005
M29-UBF	05 15 96	<0.1	<0.005	0.0045	0.11	<0.001	<0.005
	06 14 96	<0.1	<0.005	<0.002	0.11	<0.001	<0.005
	07 16 96	<0.1	<0.005	<0.002	0.11	<0.001	<0.005
	08 08 96	<0.1	<0.005	<0.002	0.11	<0.001	<0.005
	09 16 96	<0.1	<0.005	0.0022	0.11	<0.001	<0.005
	10 09 96	<0.1	<0.005	<0.002	0.11	<0.001	<0.005
	11 13 96	<0.1	<0.005	<0.002	0.11	<0.001	<0.005
	12 18 96	<0.1	<0.005	<0.002	0.10	<0.001	<0.005
	01 22 97	<0.1	<0.005	<0.002	0.11	<0.001	<0.005
	02 11 97	<0.1	<0.005	0.0024	0.11	<0.001	<0.005
	03 25 97	<0.1	<0.005	0.0021	0.11	<0.001	<0.005
	04 15 97	<0.1	<0.005	<0.002	0.11	<0.001	<0.005
M30-O	05 21 96	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	06 13 96	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	07 11 96	<0.1	<0.005	<0.002	0.021	<0.001	<0.005
	08 19 96	<0.1	<0.005	<0.002	0.021	<0.001	<0.005
	09 16 96	<0.1	<0.005	<0.002	0.019	<0.001	<0.005
	10 09 96	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	11 13 96	<0.1	<0.005	<0.002	0.019	<0.001	<0.005
	12 18 96	<0.1	<0.005	<0.002	0.020	<0.001	<0.005
	01 22 97	<0.1	<0.005	<0.002	0.018	<0.001	<0.005
	02 11 97	<0.1	<0.005	<0.002	0.018	<0.001	<0.005
	03 25 97	<0.1	<0.005	<0.002	0.017	<0.001	<0.005
	04 15 97	<0.1	<0.005	<0.002	0.018	<0.001	<0.005

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Al	Sb	As	Ba	Be	Cd
M31-LBF	05 21 96	<0.1	<0.005	0.016	0.069	<0.001	<0.005
	06 13 96	<0.1	<0.005	<0.002	0.067	<0.001	<0.005
	07 11 96	<0.1	<0.005	0.0027	0.065	<0.001	<0.005
	08 19 96	<0.1	<0.005	0.0029	0.064	<0.001	<0.005
	09 16 96	<0.1	<0.005	<0.002	0.058	<0.001	<0.005
	10 09 96	<0.1	<0.005	<0.002	0.061	<0.001	<0.005
	11 13 96	<0.1	<0.005	<0.002	0.060	<0.001	<0.005
	12 18 96	<0.1	<0.005	<0.002	0.060	<0.001	<0.005
	01 22 97	<0.1	<0.005	<0.002	0.060	<0.001	<0.005
	02 11 97	<0.1	<0.005	<0.002	0.058	<0.001	<0.005
	03 25 97	<0.1	<0.005	<0.002	0.056	<0.001	<0.005
	04 15 97	<0.1	<0.005	<0.002	0.055	<0.001	<0.005
M32-UBF	05 21 96	<0.1	<0.005	0.0021	0.14	<0.001	<0.005
	06 12 96	<0.1	<0.005	<0.002	0.13	<0.001	<0.005
	07 10 96	<0.1	<0.005	0.0027	0.14	<0.001	<0.005
	08 22 96	0.22	<0.005	0.0021	0.12	<0.001	<0.005
	09 09 96	<0.1	<0.005	0.0023	0.13	<0.001	<0.005
	10 07 96	<0.1	<0.005	<0.002	0.12	<0.001	0.0050
	11 11 96	<0.1	<0.005	<0.002	0.12	<0.001	<0.005
	12 16 96	<0.1	<0.005	0.0030	0.12	<0.001	<0.005
	01 23 97	<0.1	<0.005	0.0024	0.11	<0.001	<0.005
	02 10 97	<0.1	<0.005	0.0029	0.12	<0.001	<0.005
	03 24 97	<0.1	<0.005	0.0024	0.11	<0.001	<0.005
	04 14 97	<0.1	<0.005	0.0026	0.11	<0.001	<0.005
M33-UBF	05 21 96	<0.1	0.010	0.0027	0.12	<0.001	<0.005
	06 12 96	<0.1	<0.005	0.0029	0.11	<0.001	<0.005
	07 10 96	<0.1	<0.005	0.0040	0.13	<0.001	<0.005
	08 22 96	<0.1	<0.005	0.0024	0.12	<0.001	<0.005
	09 09 96	<0.1	<0.005	0.0029	0.12	<0.001	<0.005
	10 07 96	<0.1	<0.005	<0.002	0.11	<0.001	<0.005
	11 11 96	<0.1	<0.005	<0.002	0.12	<0.001	<0.005
	12 16 96	<0.1	<0.005	0.0033	0.12	<0.001	<0.005
	01 23 97	<0.1	<0.005	0.0023	0.12	<0.001	<0.005
	02 10 97	<0.1	<0.005	<0.002	0.13	<0.001	0.0090
	03 25 97	<0.1	<0.005	0.0029	0.13	<0.001	<0.005
	04 14 97	<0.1	<0.005	0.0024	0.13	<0.001	<0.005
P19-1-O	01 19 96	<0.1	<0.005	<0.002	0.016	<0.001	<0.005
	02 15 96	<0.1	<0.005	0.0020	0.015	<0.001	<0.005
	03 14 96	<0.1	<0.005	<0.002	0.015	<0.001	<0.005
	04 10 96	<0.1	<0.005	<0.002	0.014	<0.001	<0.005
	05 07 96	<0.1	<0.005	<0.002	0.016	<0.001	<0.005
	06 14 96	<0.1	<0.005	<0.002	0.015	<0.001	<0.005
	07 16 96	<0.1	<0.005	<0.002	0.015	<0.001	<0.005
	08 08 96	<0.1	<0.005	<0.002	0.0092	<0.001	<0.005
	09 11 96	<0.1	<0.005	<0.002	0.015	<0.001	<0.005
	10 10 96	<0.1	<0.005	<0.002	0.013	<0.001	<0.005
	11 14 96	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	12 19 96	<0.1	<0.005	<0.002	0.014	<0.001	<0.005

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Al	Sb	As	Ba	Be	Cd
O19-GL	01 19 96	<0.1	<0.005	0.0072	0.040	<0.001	<0.005
	02 15 96	<0.1	<0.005	0.0020	0.034	<0.001	<0.005
	03 14 96	<0.1	<0.005	<0.002	0.032	<0.001	<0.005
	04 10 96	<0.1	<0.005	<0.002	0.038	<0.001	<0.005
	05 07 96	<0.1	<0.005	<0.002	0.031	<0.001	<0.005
	06 14 96	<0.1	<0.005	<0.002	0.035	<0.001	<0.005
	07 16 96	<0.1	<0.005	<0.002	0.032	<0.001	<0.005
	08 08 96	<0.1	<0.005	<0.002	0.027	<0.001	<0.005
	09 11 96	<0.1	<0.005	<0.002	0.034	<0.001	<0.005
	10 10 96	<0.1	<0.005	<0.002	0.034	<0.001	<0.005
	11 14 96	<0.1	<0.005	<0.002	0.031	<0.001	<0.005
	12 19 96	<0.1	<0.005	<0.002	0.035	<0.001	<0.005
P49-O	01 16 96	<0.1	<0.005	<0.002	0.0080	<0.001	<0.005
	02 12 96	<0.1	<0.005	<0.002	0.0087	0.0012	<0.005
	03 11 96	0.17	<0.005	<0.002	0.0092	<0.001	<0.005
	04 22 96	<0.1	<0.005	<0.002	0.0076	<0.001	<0.005
	05 09 96	<0.1	<0.005	<0.002	0.0067	<0.001	<0.005
	06 11 96	<0.1	<0.005	<0.002	0.0074	<0.001	<0.005
	07 17 96	<0.1	<0.005	<0.002	0.0063	<0.001	0.016
	08 19 96	<0.1	<0.005	<0.002	0.0081	<0.001	<0.005
	09 16 96	<0.1	<0.005	<0.002	<0.005	<0.001	<0.005
	10 07 96	<0.1	<0.005	<0.002	0.0053	<0.001	<0.005
	11 11 96	<0.1	<0.005	<0.002	0.0071	<0.001	<0.005
	12 16 96	<0.1	<0.005	<0.002	0.0055	<0.001	<0.005
O49-GL	01 16 96	<0.1	<0.005	<0.002	0.017	<0.001	<0.005
	02 12 96	<0.1	<0.005	<0.002	0.015	<0.001	<0.005
	03 11 96	<0.1	<0.005	<0.002	0.017	<0.001	<0.005
	04 18 96	<0.1	<0.005	<0.002	0.010	<0.001	<0.005
	05 09 96	<0.1	<0.005	0.0021	0.0097	<0.001	<0.005
	06 11 96	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	07 17 96	<0.1	<0.005	<0.002	0.010	<0.001	0.018
	08 19 96	<0.1	<0.005	0.0022	0.011	<0.001	<0.005
	09 09 96	<0.1	<0.005	<0.002	0.0083	<0.001	<0.005
	10 07 96	<0.1	<0.005	<0.002	0.0087	<0.001	<0.005
	11 11 96	<0.1	<0.005	<0.002	0.011	<0.001	<0.005
	12 16 96	<0.1	<0.005	<0.002	0.012	<0.001	<0.005
Mean		-0.289	-0.00159	-0.000781	0.0369	-0.00144	-0.0165
Standard Deviation		0.228	0.00393	0.00270	0.0378	0.00155	0.0129
Alert Level		0.54	0.013	0.0091	0.17	0.0042	0.030

ID -- Insufficient number of data points
above the reporting limit

3.65 -- Prediction limit factor

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Cr	Co	Cu	Fe	Pb	Mn
M1-GL	Jul-95	<0.005	<0.04	<0.02	<0.04	<0.002	0.010
	Aug-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Sept-95	0.0031	<0.04	<0.02	0.042	<0.002	<0.01
	Oct-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Nov-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Dec-95	<0.005	<0.04	<0.02	0.16	<0.002	<0.01
	Jan-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Feb-96	<0.005	<0.04	<0.02	0.091	<0.002	0.065
	Mar-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Apr-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	May-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Jun-96	0.0098	<0.04	<0.02	<0.04	<0.002	<0.01
M2-GU	Jun-95	<0.005	<0.04	<0.02	<0.04	0.0052	<0.01
	Jul-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Aug-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Sept-95	<0.005	<0.04	<0.02	0.11	<0.002	<0.01
	Oct-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Nov-95	<0.005	<0.04	<0.02	0.067	<0.002	<0.01
	Dec-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Jan-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Feb-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Mar-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Apr-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	May-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
M3-GL	Jun-95	<0.005	<0.04	<0.02	0.057	0.0044	<0.01
	Jul-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Aug-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Sept-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Oct-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Nov-95	0.0052	<0.04	<0.02	<0.04	<0.002	<0.01
	Dec-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Jan-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Feb-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Mar-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Apr-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	May-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
M4-O	Jun-95	<0.005	<0.04	<0.02	0.058	0.0038	<0.01
	Jul-95	<0.005	<0.04	<0.02	<0.04	<0.002	0.022
	Aug-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Sept-95	<0.005	<0.04	<0.02	0.058	<0.002	0.011
	Oct-95	<0.005	<0.04	<0.02	<0.04	<0.002	0.015
	Nov-95	0.0051	<0.04	<0.02	0.040	<0.002	0.016
	Dec-95	<0.005	<0.04	<0.02	<0.04	<0.002	0.025
	Jan-96	<0.005	<0.04	<0.02	<0.04	<0.002	0.020
	Feb-96	<0.005	<0.04	<0.02	<0.04	<0.002	0.014
	Mar-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Apr-96	<0.005	<0.04	<0.02	<0.04	<0.002	0.016
	May-96	<0.005	<0.04	<0.02	<0.04	<0.002	0.013

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Cr	Co	Cu	Fe	Pb	Mn
M6-GU	Jul-95	0.012	<0.04	<0.02	0.043	<0.002	0.040
	Aug-95	0.0069	<0.04	<0.02	<0.04	<0.002	0.022
	Sept-95	0.0086	<0.04	<0.02	<0.04	<0.002	0.021
	Oct-95	0.0089	<0.04	<0.02	0.069	<0.002	0.020
	Nov-95	0.010	<0.04	<0.02	0.24	0.0024	0.021
	Dec-95	0.0077	<0.04	<0.02	0.16	0.0025	0.015
	Jan-96	0.031	<0.04	<0.02	<0.04	<0.002	0.013
	Feb-96	0.0063	<0.04	<0.02	<0.04	<0.002	0.013
	Mar-96	0.010	<0.04	<0.02	<0.04	<0.002	0.014
	Apr-96	0.0053	<0.04	<0.02	<0.04	<0.002	<0.01
	May-96	0.0064	<0.04	<0.02	<0.04	<0.002	<0.01
	Jun-96	0.019	<0.04	<0.02	<0.04	<0.002	<0.01
M7-GL	Aug-95	<0.005	<0.04	<0.02	0.042	<0.002	0.010
	Sept-95	<0.005	<0.04	<0.02	6.2	0.0041	0.17
	Oct-95	<0.005	<0.04	<0.02	0.15	<0.002	<0.01
	Nov-95	<0.005	<0.04	<0.02	0.14	<0.002	<0.01
	Dec-95	<0.005	<0.04	<0.02	0.20	0.0029	<0.01
	Jan-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Feb-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Mar-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Apr-96	0.0051	<0.04	<0.02	0.080	<0.002	<0.01
	May-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Jun-96	0.0064	<0.04	<0.02	<0.04	<0.002	<0.01
	Jul-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
M8-O	Jul-95	<0.005	<0.04	<0.02	0.20	<0.002	0.019
	Aug-95	0.014	<0.04	<0.02	0.078	<0.002	0.011
	Sept-95	0.012	<0.04	<0.02	<0.04	<0.002	<0.01
	Oct-95	0.0076	<0.04	<0.02	0.068	<0.002	<0.01
	Nov-95	0.0091	<0.04	<0.02	0.053	<0.002	<0.01
	Dec-95	0.0058	<0.04	<0.02	0.16	<0.002	<0.01
	Jan-96	0.0098	<0.04	<0.02	<0.04	<0.002	<0.01
	Feb-96	0.0093	<0.04	<0.02	<0.04	<0.002	<0.01
	Mar-96	0.0092	<0.04	<0.02	<0.04	<0.002	<0.01
	Apr-96	0.0073	<0.04	<0.02	<0.04	<0.002	<0.01
	May-96	0.010	<0.04	<0.02	<0.04	<0.002	<0.01
	Jun-96	0.0088	<0.04	<0.02	<0.04	<0.002	<0.01
M14-GL	Jul-95	<0.005	<0.04	<0.02	<0.04	<0.002	0.025
	Aug-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Sept-95	0.0038	<0.04	<0.02	0.042	<0.002	<0.01
	Oct-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Nov-95	<0.005	<0.04	<0.02	<0.04	<0.002	0.015
	Dec-95	<0.005	<0.04	<0.02	<0.04	<0.002	0.010
	Jan-96	<0.005	<0.04	<0.02	<0.04	<0.002	0.013
	Feb-96	<0.005	<0.04	<0.02	<0.04	<0.002	0.044
	Mar-96	<0.005	<0.04	<0.02	0.049	<0.002	0.054
	Apr-96	<0.005	<0.04	<0.02	<0.04	<0.002	0.044
	May-96	<0.005	<0.04	0.023	<0.04	<0.002	0.047
	Jun-96	0.0078	<0.04	<0.02	<0.04	<0.002	0.026

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Cr	Co	Cu	Fe	Pb	Mn
M15-GU	Jul-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Aug-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Sept-95	0.0026	<0.04	<0.02	0.048	<0.002	<0.01
	Oct-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Nov-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Dec-95	0.014	<0.04	<0.02	<0.04	<0.002	<0.01
	Jan-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Feb-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Mar-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Apr-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	May-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Jun-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
M16-GU	Jul-95	<0.005	<0.04	<0.02	0.10	<0.002	0.060
	Aug-95	<0.005	<0.04	<0.02	0.17	<0.002	0.026
	Sept-95	0.0012	<0.04	<0.02	0.17	<0.002	0.024
	Oct-95	<0.005	<0.04	<0.02	0.33	<0.002	0.031
	Nov-95	<0.005	<0.04	<0.02	0.20	<0.002	0.025
	Dec-95	<0.005	<0.04	<0.02	0.16	<0.002	0.024
	Jan-96	<0.005	<0.04	<0.02	0.15	<0.002	0.021
	Feb-96	<0.005	<0.04	<0.02	0.15	<0.002	0.021
	Mar-96	<0.005	<0.04	<0.02	0.14	<0.002	0.019
	Apr-96	<0.005	<0.04	<0.02	0.11	<0.002	0.017
	May-96	<0.005	<0.04	<0.02	0.12	<0.002	0.016
	Jun-96	<0.005	<0.04	<0.02	0.083	<0.002	0.018
M17-GL	05 29 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.068
	06 13 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.070
	07 11 96	<0.005	<0.04	<0.02	0.086	<0.002	0.056
	08 22 96	<0.005	<0.04	0.044	<0.04	<0.002	0.051
	09 11 96	<0.005	<0.04	<0.02	<0.04	0.0021	0.036
	10 10 96	<0.005	<0.04	<0.02	0.053	<0.002	0.032
	11 14 96	<0.005	<0.04	<0.02	0.064	<0.002	0.026
	12 19 96	<0.005	<0.04	<0.02	0.048	<0.002	0.019
	01 23 97	0.033	<0.04	<0.02	0.049	<0.002	0.012
	02 12 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	03 26 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	04 16 97	<0.005	<0.04	<0.02	0.043	<0.002	<0.01
M18-GU	Jul-95	<0.005	<0.04	<0.02	<0.04	<0.002	0.020
	Aug-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Sept-95	0.0028	<0.04	<0.02	<0.04	<0.002	0.011
	Oct-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Nov-95	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Dec-95	<0.005	<0.04	<0.02	0.16	<0.002	<0.01
	Jan-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Feb-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Mar-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	Apr-96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	May-96	<0.005	<0.04	<0.02	0.055	<0.002	<0.01
	Jun-96	0.010	<0.04	<0.02	<0.04	<0.002	<0.01

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Cr	Co	Cu	Fe	Pb	Mn
M19-LBF	05 09 96	<0.005	<0.04	<0.02	0.046	0.0035	0.084
	06 12 96	0.0089	<0.04	<0.02	0.061	<0.002	0.14
	07 10 96	<0.005	<0.04	<0.02	0.049	<0.002	0.11
	08 07 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.080
	09 10 96	<0.005	<0.04	<0.02	0.057	<0.002	0.086
	10 08 96	<0.005	<0.04	<0.02	0.058	<0.002	0.077
	11 12 96	<0.005	<0.04	<0.02	0.068	<0.002	0.081
	12 17 96	<0.005	<0.04	<0.02	0.12	<0.002	0.082
	01 21 97	<0.005	<0.04	<0.02	0.11	<0.002	0.072
	02 10 97	<0.005	<0.04	<0.02	0.10	0.0041	0.073
	03 24 97	<0.005	<0.04	<0.02	0.063	<0.002	0.083
	04 14 97	<0.005	<0.04	<0.02	0.065	<0.002	0.075
M20-O	05 09 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	06 12 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.014
	07 10 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	08 22 96	<0.005	<0.04	<0.02	0.25	<0.002	0.043
	09 11 96	<0.005	<0.04	<0.02	0.59	<0.002	0.066
	10 10 96	<0.005	<0.04	<0.02	1.5	<0.002	0.13
	11 14 96	<0.005	<0.04	<0.02	1.3	<0.002	0.12
	12 19 96	<0.005	<0.04	<0.02	1.2	<0.002	0.099
	01 23 97	<0.005	<0.04	<0.02	1.2	<0.002	0.093
	02 12 97	<0.005	<0.04	<0.02	1.3	<0.002	0.097
	03 26 97	<0.005	<0.04	<0.02	1.1	<0.002	0.092
	04 16 97	<0.005	<0.04	<0.02	1.7	<0.002	0.13
M21-UBF	05 09 96	<0.005	<0.04	<0.02	0.055	<0.002	<0.01
	06 12 96	<0.005	<0.04	<0.02	0.12	<0.002	<0.01
	07 10 96	<0.005	<0.04	<0.02	0.079	<0.002	<0.01
	08 07 96	0.0071	<0.04	<0.02	<0.04	<0.002	<0.01
	09 10 96	<0.005	<0.04	<0.02	0.055	<0.002	<0.01
	10 08 96	<0.005	<0.04	<0.02	0.043	<0.002	<0.01
	11 12 96	<0.005	<0.04	<0.02	0.094	<0.002	<0.01
	12 17 96	<0.005	<0.04	<0.02	0.27	<0.002	<0.01
	01 21 97	<0.005	<0.04	<0.02	0.23	<0.002	<0.01
	02 10 97	<0.005	<0.04	<0.02	0.058	0.0025	<0.01
	03 24 97	<0.005	<0.04	<0.02	0.040	<0.002	<0.01
	04 14 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
M22-O	05 28 96	<0.005	<0.04	<0.02	0.072	<0.002	0.010
	06 17 96	0.092	<0.04	<0.02	0.10	<0.002	<0.01
	07 18 96	<0.005	<0.04	<0.02	0.12	<0.002	<0.01
	08 07 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	09 10 96	<0.005	<0.04	<0.02	0.088	<0.002	<0.01
	10 08 96	<0.005	<0.04	<0.02	0.060	<0.002	<0.01
	11 12 96	<0.005	<0.04	<0.02	0.34	<0.002	<0.01
	12 17 96	<0.005	<0.04	<0.02	0.088	<0.002	<0.01
	01 21 97	<0.005	<0.04	<0.02	0.11	<0.002	<0.01
	02 10 97	<0.005	<0.04	<0.02	0.056	<0.002	<0.01
	03 24 97	<0.005	<0.04	<0.02	0.062	<0.002	<0.01
	04 14 97	<0.005	<0.04	<0.02	0.076	<0.002	<0.01

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Cr	Co	Cu	Fe	Pb	Mn
M23-UBF	05 23 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	06 17 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	07 18 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	08 07 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	09 10 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	10 08 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	11 12 96	<0.005	<0.04	<0.02	0.073	<0.002	<0.01
	12 17 96	<0.005	<0.04	<0.02	0.22	<0.002	<0.01
	01 21 97	<0.005	<0.04	<0.02	0.18	<0.002	<0.01
	02 10 97	<0.005	<0.04	<0.02	0.045	0.0061	<0.01
	03 24 97	<0.005	<0.04	<0.02	0.074	<0.002	<0.01
	04 14 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
M24-O	05 28 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.032
	06 13 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.023
	07 11 96	<0.005	<0.04	<0.02	0.13	<0.002	0.020
	08 22 96	<0.005	<0.04	0.041	0.053	<0.002	0.016
	09 11 96	<0.005	<0.04	<0.02	0.045	<0.002	0.015
	10 10 96	<0.005	<0.04	<0.02	0.048	<0.002	0.013
	11 14 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.011
	12 19 96	<0.005	<0.04	<0.02	0.14	<0.002	0.015
	01 23 97	<0.005	<0.04	<0.02	0.13	0.0035	0.011
	02 12 97	<0.005	<0.04	<0.02	<0.04	<0.002	0.011
	03 26 97	<0.005	<0.04	<0.02	<0.04	<0.002	0.011
	04 16 97	<0.005	<0.04	<0.02	<0.04	<0.002	0.013
M25-UBF	05 28 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	06 13 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	07 11 96	<0.005	<0.04	<0.02	0.15	<0.002	<0.01
	08 22 96	<0.005	<0.04	0.033	<0.04	<0.002	<0.01
	09 11 96	<0.005	<0.04	<0.02	0.047	<0.002	<0.01
	10 10 96	<0.005	<0.04	<0.02	0.059	<0.002	<0.01
	11 14 96	<0.005	<0.04	<0.02	0.050	<0.002	<0.01
	12 19 96	<0.005	<0.04	<0.02	0.18	<0.002	<0.01
	01 23 97	<0.005	<0.04	<0.02	0.16	<0.002	<0.01
	02 12 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	03 26 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	04 16 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
M26-O	05 15 96	<0.005	<0.04	0.025	0.050	<0.002	0.010
	06 14 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.011
	07 16 96	<0.005	<0.04	<0.02	0.25	<0.002	0.011
	08 08 96	0.0053	<0.04	<0.02	0.081	<0.002	<0.01
	09 16 96	0.0057	<0.04	<0.02	0.091	<0.002	<0.01
	10 09 96	<0.005	<0.04	<0.02	0.085	<0.002	<0.01
	11 13 96	<0.005	<0.04	<0.02	0.059	<0.002	<0.01
	12 18 96	0.0077	<0.04	<0.02	0.051	<0.002	<0.01
	01 22 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	02 11 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	03 25 97	<0.005	<0.04	<0.02	0.061	<0.002	<0.01
	04 15 97	0.0080	<0.04	<0.02	<0.04	0.0036	<0.01

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Cr	Co	Cu	Fe	Pb	Mn
M27-LBF	05 15 96	<0.005	<0.04	0.022	<0.04	<0.002	<0.01
	06 14 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	07 16 96	<0.005	<0.04	<0.02	0.16	<0.002	<0.01
	08 08 96	<0.005	<0.04	<0.02	0.14	<0.002	<0.01
	09 16 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	10 09 96	0.0075	<0.04	<0.02	0.048	<0.002	<0.01
	11 13 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	12 18 96	<0.005	<0.04	<0.02	0.13	<0.002	<0.01
	01 22 97	<0.005	<0.04	<0.02	0.14	<0.002	<0.01
	02 11 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	03 25 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	04 15 97	<0.005	<0.04	<0.02	<0.04	0.0029	<0.01
M28-LBF	05 15 96	<0.005	<0.04	0.021	<0.04	<0.002	<0.01
	06 14 96	<0.005	<0.04	<0.02	0.056	<0.002	0.012
	07 16 96	<0.005	<0.04	<0.02	0.093	<0.002	0.011
	08 08 96	<0.005	<0.04	<0.02	0.092	<0.002	<0.01
	09 16 96	<0.005	<0.04	<0.02	0.079	<0.002	<0.01
	10 09 96	<0.005	<0.04	<0.02	0.14	<0.002	<0.01
	11 13 96	<0.005	<0.04	<0.02	0.079	<0.002	<0.01
	12 18 96	<0.005	<0.04	<0.02	0.066	<0.002	<0.01
	01 22 97	<0.005	<0.04	<0.02	0.052	<0.002	<0.01
	02 11 97	<0.005	<0.04	0.032	<0.04	<0.002	<0.01
	03 25 97	<0.005	<0.04	<0.02	0.089	<0.002	<0.01
	04 15 97	<0.005	<0.04	<0.02	0.071	<0.002	<0.01
M29-UBF	05 15 96	<0.005	<0.04	0.032	0.060	<0.002	0.013
	06 14 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	07 16 96	<0.005	<0.04	<0.02	0.22	<0.002	<0.01
	08 08 96	<0.005	<0.04	<0.02	0.23	<0.002	<0.01
	09 16 96	<0.005	<0.04	<0.02	0.093	<0.002	<0.01
	10 09 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	11 13 96	<0.005	<0.04	<0.02	0.058	<0.002	<0.01
	12 18 96	<0.005	<0.04	<0.02	0.20	<0.002	<0.01
	01 22 97	<0.005	<0.04	<0.02	0.23	<0.002	<0.01
	02 11 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	03 25 97	<0.005	<0.04	<0.02	0.061	<0.002	<0.01
	04 15 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
M30-O	05 21 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	06 13 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.013
	07 11 96	<0.005	<0.04	<0.02	0.16	<0.002	0.015
	08 19 96	<0.005	<0.04	<0.02	0.18	<0.002	0.020
	09 16 96	0.012	<0.04	<0.02	0.21	<0.002	0.019
	10 09 96	<0.005	<0.04	<0.02	0.28	<0.002	0.018
	11 13 96	<0.005	<0.04	<0.02	0.21	<0.002	<0.01
	12 18 96	<0.005	<0.04	<0.02	0.42	<0.002	0.028
	01 22 97	<0.005	<0.04	<0.02	0.40	<0.002	0.020
	02 11 97	<0.005	<0.04	<0.02	0.23	<0.002	0.017
	03 25 97	<0.005	<0.04	<0.02	0.26	<0.002	0.018
	04 15 97	<0.005	<0.04	<0.02	0.31	0.0031	0.017

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Cr	Co	Cu	Fe	Pb	Mn
M31-LBF	05 21 96	<0.005	<0.04	<0.02	0.047	<0.002	0.023
	06 13 96	<0.005	<0.04	<0.02	0.058	<0.002	0.010
	07 11 96	<0.005	<0.04	<0.02	0.19	<0.002	<0.01
	08 19 96	<0.005	<0.04	<0.02	0.18	<0.002	<0.01
	09 16 96	<0.005	<0.04	<0.02	0.066	<0.002	<0.01
	10 09 96	<0.005	<0.04	<0.02	0.075	<0.002	<0.01
	11 13 96	<0.005	<0.04	<0.02	0.074	<0.002	<0.01
	12 18 96	<0.005	<0.04	<0.02	0.23	<0.002	<0.01
	01 22 97	<0.005	<0.04	<0.02	0.19	<0.002	0.014
	02 11 97	<0.005	<0.04	<0.02	<0.04	<0.002	0.010
	03 25 97	<0.005	<0.04	<0.02	0.078	<0.002	<0.01
	04 15 97	0.0062	<0.04	<0.02	0.070	0.0044	<0.01
M32-UBF	05 21 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	06 12 96	0.011	<0.04	<0.02	<0.04	<0.002	<0.01
	07 10 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	08 22 96	<0.005	<0.04	0.040	<0.04	<0.002	<0.01
	09 09 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	10 07 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	11 11 96	<0.005	<0.04	<0.02	0.21	<0.002	<0.01
	12 16 96	<0.005	<0.04	<0.02	0.23	<0.002	<0.01
	01 23 97	<0.005	<0.04	<0.02	0.24	<0.002	<0.01
	02 10 97	<0.005	<0.04	<0.02	0.050	0.0047	<0.01
	03 24 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	04 14 97	<0.005	<0.04	0.053	0.24	<0.002	<0.01
M33-UBF	05 21 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	06 12 96	0.0093	<0.04	<0.02	<0.04	<0.002	<0.01
	07 10 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	08 22 96	<0.005	<0.04	0.046	<0.04	<0.002	<0.01
	09 09 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	10 07 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	11 11 96	<0.005	<0.04	<0.02	0.20	<0.002	<0.01
	12 16 96	<0.005	<0.04	<0.02	0.20	<0.002	<0.01
	01 23 97	<0.005	<0.04	<0.02	0.20	<0.002	<0.01
	02 10 97	<0.005	<0.04	<0.02	<0.04	0.0042	<0.01
	03 25 97	0.025	<0.04	<0.02	<0.04	<0.002	<0.01
	04 14 97	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
P19-1-O	01 19 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.051
	02 15 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.035
	03 14 96	<0.005	<0.04	<0.02	0.060	<0.002	0.044
	04 10 96	0.0055	<0.04	<0.02	<0.04	<0.002	0.040
	05 07 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.038
	06 14 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.025
	07 16 96	<0.005	<0.04	<0.02	0.058	<0.002	0.029
	08 08 96	<0.005	<0.04	<0.02	0.060	<0.002	0.021
	09 11 96	<0.005	<0.04	<0.02	0.051	<0.002	0.025
	10 10 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	11 14 96	<0.005	<0.04	<0.02	0.066	<0.002	<0.01
	12 19 96	<0.005	<0.04	<0.02	0.059	<0.002	<0.01

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)					
		Cr	Co	Cu	Fe	Pb	Mn
O19-GL	01 19 96	0.0063	<0.04	<0.02	<0.04	<0.002	0.19
	02 15 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.11
	03 14 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.080
	04 10 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.050
	05 07 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.041
	06 14 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.041
	07 16 96	<0.005	<0.04	<0.02	0.056	<0.002	0.031
	08 08 96	<0.005	<0.04	<0.02	0.068	<0.002	0.021
	09 11 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.026
	10 10 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.015
	11 14 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.012
	12 19 96	<0.005	<0.04	<0.02	0.060	<0.002	<0.01
P49-O	01 16 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.028
	02 12 96	<0.005	<0.04	0.026	0.072	<0.002	0.023
	03 11 96	<0.005	<0.04	<0.02	0.11	<0.002	0.011
	04 22 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.025
	05 09 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.020
	06 11 96	0.0082	<0.04	<0.02	<0.04	<0.002	0.017
	07 17 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.017
	08 19 96	<0.005	<0.04	0.023	0.050	<0.002	0.015
	09 16 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.014
	10 07 96	<0.005	<0.04	<0.02	<0.04	<0.002	<0.01
	11 11 96	<0.005	<0.04	<0.02	0.057	<0.002	0.012
	12 16 96	<0.005	<0.04	<0.02	0.054	<0.002	<0.01
O49-GL	01 16 96	<0.005	<0.04	<0.02	<0.04	<0.002	0.20
	02 12 96	<0.005	<0.04	<0.02	0.13	<0.002	0.13
	03 11 96	<0.005	<0.04	<0.02	0.10	<0.002	0.12
	04 18 96	<0.005	<0.04	<0.02	0.12	<0.002	0.077
	05 09 96	<0.005	<0.04	<0.02	0.059	<0.002	0.061
	06 11 96	0.0061	<0.04	<0.02	0.088	<0.002	0.058
	07 17 96	<0.005	<0.04	<0.02	0.084	<0.002	0.045
	08 19 96	<0.005	<0.04	<0.02	0.12	<0.002	0.036
	09 09 96	<0.005	<0.04	<0.02	0.11	<0.002	0.026
	10 07 96	<0.005	<0.04	<0.02	0.086	<0.002	0.026
	11 11 96	<0.005	<0.04	<0.02	0.11	<0.002	0.039
	12 16 96	<0.005	<0.04	<0.02	0.17	<0.002	0.035
Mean		-0.0148	ID	-0.0303	-0.128	-0.00376	-0.00639
Standard Deviation		0.0175	ID	0.0302	0.550	0.00367	0.0521
Alert Level		0.049	reserved	0.080	1.9	0.010	0.18

ID -- Insufficient number of data points
above the reporting limit

3.65 -- Prediction limit factor

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)				
		Hg	Ni	Se	Tl	Zn
M1-GL	Jul-95	<0.0002	<0.04	<0.004	<0.002	0.012
	Aug-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Sept-95	<0.0002	<0.04	<0.004	<0.002	0.013
	Oct-95	0.00030	<0.04	<0.004	<0.002	<0.01
	Nov-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Dec-95	<0.0002	<0.04	<0.004	<0.002	0.22
	Jan-96	<0.0002	0.054	<0.004	<0.002	<0.01
	Feb-96	<0.0002	<0.04	<0.004	<0.002	0.014
	Mar-96	<0.0002	<0.04	<0.004	<0.002	0.013
	Apr-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	May-96	<0.0002	<0.04	<0.004	<0.002	0.015
	Jun-96	<0.0002	<0.04	<0.004	<0.002	0.016
M2-GU	Jun-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Jul-95	<0.0002	0.049	<0.004	<0.002	0.019
	Aug-95	<0.0002	<0.04	0.0059	<0.002	<0.01
	Sept-95	<0.0002	0.075	<0.004	<0.002	0.017
	Oct-95	<0.0002	<0.04	<0.004	<0.002	0.022
	Nov-95	<0.0002	<0.04	<0.004	<0.002	0.010
	Dec-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Jan-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Feb-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Mar-96	<0.0002	<0.04	<0.004	<0.002	0.014
	Apr-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	May-96	<0.0002	<0.04	<0.004	<0.002	0.013
M3-GL	Jun-95	<0.0002	<0.04	<0.004	<0.002	0.043
	Jul-95	<0.0002	0.043	<0.004	<0.002	0.018
	Aug-95	<0.0002	<0.04	0.0052	<0.002	<0.01
	Sept-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Oct-95	<0.0002	<0.04	<0.004	<0.002	0.019
	Nov-95	<0.0002	<0.04	<0.004	<0.002	0.014
	Dec-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Jan-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Feb-96	<0.0002	<0.04	<0.004	<0.002	0.011
	Mar-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Apr-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	May-96	<0.0002	<0.04	<0.004	<0.002	<0.01
M4-O	Jun-95	<0.0002	<0.04	<0.004	<0.002	0.045
	Jul-95	<0.0002	<0.04	<0.004	<0.002	0.024
	Aug-95	<0.0002	<0.04	0.0083	<0.002	<0.01
	Sept-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Oct-95	<0.0002	<0.04	<0.004	<0.002	0.017
	Nov-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Dec-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Jan-96	<0.0002	<0.04	<0.004	<0.002	0.021
	Feb-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Mar-96	<0.0002	<0.04	<0.004	<0.002	0.013
	Apr-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	May-96	<0.0002	<0.04	<0.004	<0.002	0.010

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)				
		Hg	Ni	Se	Tl	Zn
M6-GU	Jul-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Aug-95	0.00020	<0.04	<0.004	<0.002	<0.01
	Sept-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Oct-95	<0.0002	<0.04	<0.004	<0.002	0.13
	Nov-95	<0.0002	<0.04	<0.004	<0.002	0.036
	Dec-95	<0.0002	<0.04	<0.004	<0.002	0.21
	Jan-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Feb-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Mar-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Apr-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	May-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Jun-96	<0.0002	<0.04	0.0043	<0.002	0.011
M7-GL	Aug-95	<0.0002	<0.04	<0.004	<0.002	0.014
	Sept-95	<0.0002	<0.04	<0.004	<0.002	0.018
	Oct-95	<0.0002	<0.04	<0.004	<0.002	0.17
	Nov-95	<0.0002	<0.04	<0.004	<0.002	0.044
	Dec-95	<0.0002	<0.04	<0.004	<0.002	0.23
	Jan-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Feb-96	<0.0002	<0.04	<0.004	<0.002	0.010
	Mar-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Apr-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	May-96	<0.0002	<0.04	<0.004	<0.002	0.011
	Jun-96	<0.0002	<0.04	<0.004	<0.002	0.013
	Jul-96	<0.0002	0.047	<0.004	<0.002	0.016
M8-O	Jul-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Aug-95	<0.0002	<0.04	0.0048	<0.002	0
	Sept-95	<0.0002	<0.04	0.0047	<0.002	<0.01
	Oct-95	<0.0002	<0.04	0.0054	<0.002	0.14
	Nov-95	<0.0002	<0.04	0.0059	<0.002	0.044
	Dec-95	<0.0002	<0.04	0.0045	<0.002	0.22
	Jan-96	<0.0002	<0.04	0.0070	<0.002	<0.01
	Feb-96	<0.0002	<0.04	<0.004	<0.002	0.013
	Mar-96	<0.0002	<0.04	0.0049	<0.002	<0.01
	Apr-96	<0.0002	<0.04	0.0048	<0.002	<0.01
	May-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Jun-96	<0.0002	<0.04	<0.004	<0.002	0.018
M14-GL	Jul-95	<0.0002	<0.04	<0.004	<0.002	0.024
	Aug-95	<0.0002	<0.04	0.011	<0.002	<0.01
	Sept-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Oct-95	<0.0002	<0.04	<0.004	<0.002	0.021
	Nov-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Dec-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Jan-96	<0.0002	0.061	<0.004	<0.002	<0.01
	Feb-96	<0.0002	<0.04	<0.004	<0.002	0.019
	Mar-96	<0.0002	<0.04	<0.004	<0.002	0.013
	Apr-96	<0.0002	<0.04	<0.004	<0.002	0.019
	May-96	<0.0002	<0.04	<0.004	<0.002	0.010
	Jun-96	<0.0002	0.040	<0.004	<0.002	0.018

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)				
		Hg	Ni	Se	Tl	Zn
M15-GU	Jul-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Aug-95	<0.0002	<0.04	0.023	<0.002	0.013
	Sept-95	<0.0002	<0.04	<0.004	<0.002	0.014
	Oct-95	<0.0002	<0.04	<0.004	<0.002	0.025
	Nov-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Dec-95	<0.0002	<0.04	<0.004	<0.002	0.011
	Jan-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Feb-96	<0.0002	<0.04	<0.004	<0.002	0.012
	Mar-96	<0.0002	<0.04	<0.004	<0.002	0.012
	Apr-96	<0.0002	<0.04	<0.004	<0.002	0.020
	May-96	<0.0002	0.055	<0.004	<0.002	0.034
	Jun-96	<0.0002	<0.04	<0.004	<0.002	0.011
M16-GU	Jul-95	<0.0002	<0.04	<0.004	<0.002	0.041
	Aug-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Sept-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Oct-95	<0.0002	<0.04	<0.004	<0.002	0.30
	Nov-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Dec-95	<0.0002	<0.04	<0.004	<0.002	0.013
	Jan-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Feb-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Mar-96	<0.0002	<0.04	<0.004	<0.002	0.015
	Apr-96	<0.0002	<0.04	<0.004	<0.002	0.015
	May-96	<0.0002	<0.04	<0.004	<0.002	0.054
	Jun-96	<0.0002	<0.04	<0.004	<0.002	<0.01
M17-GL	05 29 96	<0.0002	<0.04	<0.004	<0.002	0.015
	06 13 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	07 11 96	<0.0002	<0.04	<0.004	<0.002	0.015
	08 22 96	<0.0002	<0.04	<0.004	<0.002	0.016
	09 11 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	10 10 96	<0.0002	<0.04	<0.004	<0.002	0.021
	11 14 96	<0.0002	<0.04	<0.004	0.0028	<0.01
	12 19 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	01 23 97	<0.0002	<0.04	<0.004	<0.002	0.041
	02 12 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 26 97	<0.0002	<0.04	<0.004	<0.002	0.016
	04 16 97	<0.0002	<0.04	<0.004	<0.002	0.013
M18-GU	Jul-95	<0.0002	<0.04	<0.004	<0.002	0.033
	Aug-95	<0.0002	<0.04	<0.004	<0.002	0.012
	Sept-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Oct-95	<0.0002	<0.04	<0.004	<0.002	0.011
	Nov-95	<0.0002	<0.04	<0.004	<0.002	<0.01
	Dec-95	<0.0002	<0.04	<0.004	<0.002	0.17
	Jan-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	Feb-96	<0.0002	<0.04	<0.004	<0.002	0.019
	Mar-96	<0.0002	<0.04	<0.004	<0.002	0.017
	Apr-96	<0.0002	<0.04	<0.004	<0.002	<0.01
	May-96	<0.0002	<0.04	<0.004	<0.002	0.022
	Jun-96	<0.0002	<0.04	<0.004	<0.002	0.018

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)				
		Hg	Ni	Se	Tl	Zn
M19-LBF	05 09 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	06 12 96	<0.0002	<0.04	<0.004	<0.002	0.011
	07 10 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	08 07 96	<0.0002	<0.04	<0.004	<0.002	0.011
	09 10 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	10 08 96	<0.0002	<0.04	<0.004	<0.002	0.015
	11 12 96	<0.0002	<0.04	<0.004	<0.002	0.014
	12 17 96	<0.0002	<0.04	<0.004	0.0070	0.019
	01 21 97	<0.0002	<0.04	<0.004	<0.002	0.041
	02 10 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 24 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	04 14 97	<0.0002	<0.04	<0.004	<0.002	0.014
M20-O	05 09 96	<0.0002	<0.04	<0.004	<0.002	0.011
	06 12 96	<0.0002	<0.04	<0.004	<0.002	0.019
	07 10 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	08 22 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 11 96	<0.0002	<0.04	<0.004	<0.002	0.012
	10 10 96	<0.0002	<0.04	<0.004	<0.002	0.051
	11 14 96	<0.0002	<0.04	<0.004	0.0025	<0.01
	12 19 96	<0.0002	<0.04	<0.004	<0.002	0.010
	01 23 97	<0.0002	<0.04	<0.004	<0.002	0.030
	02 12 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 26 97	<0.0002	<0.04	<0.004	<0.002	0.027
	04 16 97	<0.0002	<0.04	<0.004	<0.002	0.014
M21-UBF	05 09 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	06 12 96	<0.0002	<0.04	<0.004	<0.002	0.019
	07 10 96	<0.0002	<0.04	<0.004	<0.002	0.011
	08 07 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 10 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	10 08 96	<0.0002	<0.04	<0.004	<0.002	0.017
	11 12 96	<0.0002	<0.04	<0.004	<0.002	0.026
	12 17 96	<0.0002	<0.04	<0.004	0.0094	0.012
	01 21 97	<0.0002	<0.04	<0.004	<0.002	0.030
	02 10 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 24 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	04 14 97	<0.0002	<0.04	<0.004	<0.002	0.012
M22-O	05 28 96	<0.0002	<0.04	<0.004	<0.002	0.012
	06 17 96	<0.0002	<0.04	<0.004	<0.002	0.013
	07 18 96	<0.0002	<0.04	<0.004	<0.002	0.022
	08 07 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 10 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	10 08 96	<0.0002	<0.04	<0.004	0.0069	0.012
	11 12 96	<0.0002	<0.04	<0.004	<0.002	0.015
	12 17 96	<0.0002	<0.04	<0.004	0.0057	0.013
	01 21 97	<0.0002	<0.04	<0.004	<0.002	0.026
	02 10 97	<0.0002	<0.04	<0.004	<0.002	0.034
	03 24 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	04 14 97	<0.0002	<0.04	<0.004	<0.002	<0.01

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)				
		Hg	Ni	Se	Tl	Zn
M23-UBF	05 23 96	<0.0002	<0.04	<0.004	<0.002	0.013
	06 17 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	07 18 96	<0.0002	<0.04	<0.004	<0.002	0.014
	08 07 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 10 96	<0.0002	<0.04	<0.004	<0.002	0.010
	10 08 96	<0.0002	<0.04	<0.004	0.0065	0.016
	11 12 96	<0.0002	<0.04	<0.004	<0.002	0.018
	12 17 96	<0.0002	<0.04	<0.004	0.0084	0.022
	01 21 97	<0.0002	<0.04	<0.004	<0.002	0.030
	02 10 97	<0.0002	<0.04	<0.004	<0.002	0.013
	03 24 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	04 14 97	<0.0002	<0.04	<0.004	<0.002	<0.01
M24-O	05 28 96	<0.0002	<0.04	0.0051	<0.002	<0.01
	06 13 96	<0.0002	<0.04	0.0055	<0.002	<0.01
	07 11 96	<0.0002	<0.04	0.0062	<0.002	0.021
	08 22 96	<0.0002	<0.04	0.0059	<0.002	0.084
	09 11 96	<0.0002	<0.04	0.0060	<0.002	0.016
	10 10 96	<0.0002	<0.04	0.0054	<0.002	0.050
	11 14 96	<0.0002	<0.04	0.0063	<0.002	<0.01
	12 19 96	<0.0002	<0.04	0.0055	<0.002	0.013
	01 23 97	<0.0002	<0.04	0.0065	<0.002	0.029
	02 12 97	<0.0002	<0.04	0.0056	<0.002	<0.01
	03 26 97	<0.0002	<0.04	0.0056	<0.002	0.026
	04 16 97	<0.0002	<0.04	0.0059	<0.002	0.017
M25-UBF	05 28 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	06 13 96	<0.0002	<0.04	<0.004	<0.002	0.014
	07 11 96	<0.0002	<0.04	<0.004	<0.002	0.012
	08 22 96	<0.0002	<0.04	<0.004	<0.002	0.018
	09 11 96	<0.0002	<0.04	<0.004	<0.002	0.014
	10 10 96	<0.0002	<0.04	<0.004	<0.002	0.039
	11 14 96	<0.0002	<0.04	<0.004	0.0026	<0.01
	12 19 96	<0.0002	<0.04	<0.004	<0.002	0.014
	01 23 97	<0.0002	<0.04	<0.004	<0.002	0.042
	02 12 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 26 97	<0.0002	<0.04	<0.004	<0.002	0.018
	04 16 97	<0.0002	<0.04	<0.004	<0.002	0.029
M26-O	05 15 96	<0.0002	<0.04	<0.004	<0.002	0.025
	06 14 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	07 16 96	<0.0002	<0.04	<0.004	<0.002	0.025
	08 08 96	<0.0002	<0.04	<0.004	<0.002	0.022
	09 16 96	<0.0002	<0.04	<0.004	<0.002	0.011
	10 09 96	<0.0002	<0.04	<0.004	<0.002	0.026
	11 13 96	<0.0002	<0.04	<0.004	<0.002	0.012
	12 18 96	<0.0002	<0.04	0.0044	<0.002	0.027
	01 22 97	<0.0002	<0.04	0.0040	<0.002	0.038
	02 11 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 25 97	<0.0002	<0.04	0.0052	<0.002	<0.01
	04 15 97	<0.0002	<0.04	<0.004	<0.002	<0.01

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)				
		Hg	Ni	Se	Tl	Zn
M27-LBF	05 15 96	<0.0002	<0.04	<0.004	<0.002	0.011
	06 14 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	07 16 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	08 08 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 16 96	<0.0002	<0.04	<0.004	<0.002	0.013
	10 09 96	<0.0002	<0.04	<0.004	<0.002	0.024
	11 13 96	<0.0002	<0.04	<0.004	0.0023	0.015
	12 18 96	<0.0002	<0.04	<0.004	<0.002	0.011
	01 22 97	<0.0002	<0.04	<0.004	<0.002	0.015
	02 11 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 25 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	04 15 97	<0.0002	<0.04	<0.004	<0.002	0.012
M28-LBF	05 15 96	<0.0002	<0.04	<0.004	<0.002	0.012
	06 14 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	07 16 96	<0.0002	<0.04	<0.004	<0.002	0.014
	08 08 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 16 96	<0.0002	<0.04	<0.004	<0.002	0.010
	10 09 96	<0.0002	<0.04	<0.004	<0.002	0.023
	11 13 96	<0.0002	<0.04	<0.004	0.0028	0.019
	12 18 96	<0.0002	<0.04	<0.004	<0.002	0.065
	01 22 97	<0.0002	<0.04	<0.004	<0.002	0.015
	02 11 97	<0.0002	<0.04	<0.004	<0.002	0.066
	03 25 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	04 15 97	<0.0002	<0.04	<0.004	<0.002	0.017
M29-UBF	05 15 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	06 14 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	07 16 96	<0.0002	<0.04	<0.004	<0.002	0.014
	08 08 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 16 96	<0.0002	<0.04	<0.004	<0.002	0.015
	10 09 96	<0.0002	<0.04	<0.004	<0.002	0.036
	11 13 96	<0.0002	<0.04	<0.004	<0.002	0.017
	12 18 96	<0.0002	<0.04	<0.004	0.0086	0.034
	01 22 97	<0.0002	<0.04	<0.004	<0.002	0.022
	02 11 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 25 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	04 15 97	<0.0002	<0.04	<0.004	<0.002	<0.01
M30-O	05 21 96	<0.0002	<0.04	<0.004	<0.002	0.016
	06 13 96	<0.0002	<0.04	<0.004	<0.002	0.012
	07 11 96	<0.0002	<0.04	<0.004	<0.002	0.012
	08 19 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 16 96	<0.0002	<0.04	<0.004	<0.002	0.012
	10 09 96	<0.0002	<0.04	<0.004	0.0060	0.013
	11 13 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	12 18 96	<0.0002	<0.04	<0.004	0.0087	0.021
	01 22 97	<0.0002	<0.04	<0.004	<0.002	0.038
	02 11 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 25 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	04 15 97	<0.0002	<0.04	<0.004	<0.002	<0.01

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)				
		Hg	Ni	Se	Tl	Zn
M31-LBF	05 21 96	<0.0002	<0.04	<0.004	<0.002	0.029
	06 13 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	07 11 96	<0.0002	<0.04	<0.004	<0.002	0.013
	08 19 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 16 96	<0.0002	<0.04	<0.004	<0.002	0.012
	10 09 96	<0.0002	<0.04	<0.004	<0.002	0.027
	11 13 96	<0.0002	<0.04	<0.004	<0.002	0.024
	12 18 96	<0.0002	<0.04	<0.004	0.0092	0.021
	01 22 97	<0.0002	<0.04	<0.004	<0.002	0.021
	02 11 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 25 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	04 15 97	<0.0002	<0.04	<0.004	<0.002	0.010
M32-UBF	05 21 96	<0.0002	<0.04	<0.004	<0.002	0.021
	06 12 96	<0.0002	<0.04	<0.004	<0.002	0.020
	07 10 96	<0.0002	<0.04	<0.004	<0.002	0.015
	08 22 96	<0.0002	<0.04	<0.004	<0.002	0.013
	09 09 96	<0.0002	<0.04	<0.004	<0.002	0.012
	10 07 96	<0.0002	<0.04	<0.004	<0.002	0.025
	11 11 96	<0.0002	<0.04	<0.004	<0.002	0.016
	12 16 96	<0.0002	<0.04	<0.004	<0.002	0.033
	01 23 97	<0.0002	<0.04	<0.004	<0.002	0.068
	02 10 97	<0.0002	<0.04	<0.004	<0.002	0.020
	03 24 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	04 14 97	<0.0002	<0.04	<0.004	<0.002	<0.01
M33-UBF	05 21 96	<0.0002	<0.04	<0.004	<0.002	0.015
	06 12 96	<0.0002	<0.04	<0.004	<0.002	0.015
	07 10 96	<0.0002	<0.04	<0.004	<0.002	0.012
	08 22 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 09 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	10 07 96	<0.0002	<0.04	<0.004	<0.002	0.031
	11 11 96	<0.0002	<0.04	<0.004	<0.002	0.018
	12 16 96	<0.0002	<0.04	<0.004	<0.002	0.039
	01 23 97	<0.0002	<0.04	<0.004	<0.002	0.055
	02 10 97	<0.0002	<0.04	<0.004	<0.002	0.024
	03 25 97	<0.0002	<0.04	<0.004	<0.002	<0.01
	04 14 97	<0.0002	<0.04	<0.004	<0.002	0.011
P19-1-O	01 19 96	<0.0002	<0.04	<0.004	<0.002	0.013
	02 15 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 14 96	<0.0002	<0.04	<0.004	<0.002	0.026
	04 10 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	05 07 96	<0.0002	0.058	<0.004	<0.002	<0.01
	06 14 96	<0.0002	<0.04	<0.004	<0.002	0.033
	07 16 96	<0.0002	<0.04	<0.004	<0.002	0.019
	08 08 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 11 96	<0.0002	<0.04	<0.004	<0.002	0.013
	10 10 96	<0.0002	<0.04	<0.004	<0.002	0.033
	11 14 96	<0.0002	<0.04	<0.004	0.0023	<0.01
	12 19 96	<0.0002	<0.04	<0.004	<0.002	0.012

Table 2. Alert Levels for Interwell Comparisons

Well	Sample Date	Analyte (mg/l)				
		Hg	Ni	Se	Tl	Zn
O19-GL	01 19 96	<0.0002	<0.04	<0.004	<0.002	0.012
	02 15 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 14 96	<0.0002	<0.04	<0.004	<0.002	0.014
	04 10 96	<0.0002	<0.04	<0.004	<0.002	0.011
	05 07 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	06 14 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	07 16 96	<0.0002	<0.04	<0.004	<0.002	0.012
	08 08 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 11 96	<0.0002	<0.04	<0.004	<0.002	0.017
	10 10 96	<0.0002	<0.04	<0.004	<0.002	0.030
	11 14 96	<0.0002	<0.04	<0.004	<0.002	0.013
	12 19 96	<0.0002	<0.04	<0.004	<0.002	0.016
P49-O	01 16 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	02 12 96	<0.0002	<0.04	<0.004	<0.002	0.011
	03 11 96	<0.0002	<0.04	<0.004	<0.002	0.023
	04 22 96	<0.0002	<0.04	<0.004	<0.002	0.023
	05 09 96	<0.0002	<0.04	<0.004	<0.002	0.012
	06 11 96	<0.0002	<0.04	<0.004	<0.002	0.022
	07 17 96	<0.0002	<0.04	<0.004	<0.002	0.018
	08 19 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 16 96	<0.0002	<0.04	<0.004	<0.002	0.015
	10 07 96	<0.0002	<0.04	<0.004	<0.002	0.028
	11 11 96	<0.0002	<0.04	<0.004	<0.002	0.040
	12 16 96	<0.0002	<0.04	<0.004	0.0021	0.030
O49-GL	01 16 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	02 12 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	03 11 96	<0.0002	<0.04	<0.004	<0.002	0.013
	04 18 96	<0.0002	<0.04	<0.004	<0.002	0.015
	05 09 96	<0.0002	<0.04	<0.004	<0.002	0.010
	06 11 96	<0.0002	<0.04	<0.004	<0.002	0.022
	07 17 96	<0.0002	<0.04	<0.004	<0.002	0.035
	08 19 96	<0.0002	<0.04	<0.004	<0.002	<0.01
	09 09 96	<0.0002	<0.04	<0.004	<0.002	0.027
	10 07 96	<0.0002	<0.04	<0.004	<0.002	0.029
	11 11 96	<0.0002	<0.04	<0.004	<0.002	0.012
	12 16 96	<0.0002	<0.04	<0.004	<0.002	0.031
Mean		0.0000662	-0.0140	-0.00490	-0.0113	0.00839
Standard Deviation		0.000120	0.0320	0.00614	0.00811	0.0419
Alert Level		0.00050	0.10	0.017	0.018	0.16

ID -- Insufficient number of data points
above the reporting limit

3.65 -- Prediction limit factor

TABLE 3
AQUIFER QUALITY LIMITS FOR INTRAWELL COMPARISONS

Table 3. Aquifer Quality Limits for Intrawell Comparisons

Analyte (units)	AWQS	Level	Well	Calculated AL	Is AL < AWQS?	AQL
Fluoride (mg/l)	4.0	I	M1-GL	1.1	yes	4.0
			M2-GU	1.1	yes	4.0
			M3-GL	0.89	yes	4.0
			M4-O	3.1	yes	4.0
			M6-GU	1.1	yes	4.0
			M7-GL	1.5	yes	4.0
			M8-O	3.7	yes	4.0
			M14-GL	0.91	yes	4.0
			M15-GU	0.85	yes	4.0
			M16-GU	1.0	yes	4.0
			M17-GL	1.1	yes	4.0
			M18-GU	1.3	yes	4.0
			M19-LBF	0.63	yes	4.0
			M20-O	1.1	yes	4.0
			M21-UBF	0.74	yes	4.0
			M22-O	0.88	yes	4.0
			M23-UBF	0.93	yes	4.0
			M24-O	1.7	yes	4.0
			M25-UBF	1.2	yes	4.0
			M26-O	2.3	yes	4.0
			M27-LBF	0.53	yes	4.0
			M28-LBF	1.1	yes	4.0
			M29-UBF	0.81	yes	4.0
			M30-O	1.1	yes	4.0
			M31-LBF	0.96	yes	4.0
			M32-UBF	0.86	yes	4.0
			M33-UBF	1.0	yes	4.0
			P19-1-O	1.9	yes	4.0
			O19-GL	0.89	yes	4.0
			P49-O	1.4	yes	4.0
			O49-GL	0.57	yes	4.0

AWQS -- Aquifer water quality standard

AL -- Alert level

AQL -- Aquifer quality limit

Adjusted Alpha -- Calculated as: gross alpha - total uranium

Radium -- Calculated as: radium 226 + radium 228

Table 3. Aquifer Quality Limits for Intrawell Comparisons

Analyte (units)	AWQS	Level	Well	Calculated AL	Is AL < AWQS?	AQL
Fluoride (mg/l)	4.0	II	M1-GL	1.2	yes	4.0
			M2-GU	1.2	yes	4.0
			M3-GL	0.99	yes	4.0
			M4-O	3.5	yes	4.0
			M6-GU	1.2	yes	4.0
			M7-GL	1.7	yes	4.0
			M8-O	4.2	no	4.2
			M14-GL	1.1	yes	4.0
			M15-GU	0.99	yes	4.0
			M16-GU	1.1	yes	4.0
			M17-GL	1.2	yes	4.0
			M18-GU	1.4	yes	4.0
			M19-LBF	0.68	yes	4.0
			M20-O	1.2	yes	4.0
			M21-UBF	0.81	yes	4.0
			M22-O	0.94	yes	4.0
			M23-UBF	1.0	yes	4.0
			M24-O	1.9	yes	4.0
			M25-UBF	1.3	yes	4.0
			M26-O	2.5	yes	4.0
			M27-LBF	0.59	yes	4.0
			M28-LBF	1.2	yes	4.0
			M29-UBF	0.89	yes	4.0
			M30-O	1.1	yes	4.0
			M31-LBF	1.0	yes	4.0
			M32-UBF	0.93	yes	4.0
			M33-UBF	1.1	yes	4.0
			P19-1-O	2.1	yes	4.0
			O19-GL	0.98	yes	4.0
			P49-O	1.5	yes	4.0
			O49-GL	0.61	yes	4.0

AWQS -- Aquifer water quality standard

AL -- Alert level

AQL -- Aquifer quality limit

Adjusted Alpha -- Calculated as: gross alpha - total uranium

Radium -- Calculated as: radium 226 + radium 228

Table 3. Aquifer Quality Limits for Intrawell Comparisons

Analyte (units)	AWQS	Level	Well	Calculated AL	Is AL < AWQS?	AQL
Adjusted Alpha (pCi/l)	15.0	I	M1-GL	68	no	68
			M2-GU	22	no	22
			M3-GL	59	no	59
			M4-O	47	no	47
			M6-GU	48	no	48
			M7-GL	66	no	66
			M8-O	54	no	54
			M14-GL	87	no	87
			M15-GU	33	no	33
			M16-GU	61	no	61
			M17-GL	14	yes	15
			M18-GU	62	no	62
			M19-LBF	21	no	21
			M20-O	37	no	37
			M21-UBF	45	no	45
			M22-O	47	no	47
			M23-UBF	26	no	26
			M24-O	81	no	81
			M25-UBF	55	no	55
			M26-O	15	no	15
			M27-LBF	39	no	39
			M28-LBF	29	no	29
			M29-UBF	32	no	32
			M30-O	27	no	27
			M31-LBF	41	no	41
			M32-UBF	51	no	51
			M33-UBF	47	no	47
			P19-1-O	50	no	50
			O19-GL	40	no	40
			P49-O	51	no	51
			O49-GL	72	no	72

AWQS -- Aquifer water quality standard

AL -- Alert level

AQL -- Aquifer quality limit

Adjusted Alpha -- Calculated as: gross alpha - total uranium

Radium -- Calculated as: radium 226 + radium 228

Table 3. Aquifer Quality Limits for Intrawell Comparisons

Analyte (units)	AWQS	Level	Well	Calculated AL	Is AL < AWQS?	AQL
Radium (pCi/l)	5	I	M1-GL	2.7	yes no	5
			M2-GU	2.6	no	5
			M3-GL	2.8	no	5
			M4-O	2.3	no	5
			M6-GU	3.8	no	5
			M7-GL	1.7	no	5
			M8-O	2.0	no	5
			M14-GL	2.5	no	5
			M15-GU	3.0	no	5
			M16-GU	3.4	no	5
			M17-GL	1.5	no	5
			M18-GU	3.4	no	5
			M19-LBF	2.0	no	5
			M20-O	1.5	no	5
			M21-UBF	2.2	no	5
			M22-O	2.3	no	5
			M23-UBF	2.0	no	5
			M24-O	3.8	no	5
			M25-UBF	1.3	no	5
			M26-O	2.6	no	5
			M27-LBF	3.0	no	5
			M28-LBF	1.9	no	5
			M29-UBF	1.2	no	5
			M30-O	2.5	no	5
			M31-LBF	1.2	no	5
			M32-UBF	2.1	no	5
			M33-UBF	1.5	no	5
			P19-1-O	1.7	no	5
			O19-GL	1.8	no	5
			P49-O	3.0	no	5
			O49-GL	1.9	no	5

AWQS -- Aquifer water quality standard

AL -- Alert level

AQL -- Aquifer quality limit

Adjusted Alpha -- Calculated as: gross alpha - total uranium

Radium -- Calculated as: radium 226 + radium 228

TABLE 4
AQUIFER QUALITY LIMITS FOR INTERWELL COMPARISONS

Table 4. Aquifer Quality Limits for Interwell Comparisons

Analyte	AWQS (mg/l)	Calculated AL (mg/l)	Is AL < AWQS?	AQL (mg/l)
Antimony	0.006	0.013	no	0.013
Arsenic	0.05	0.0091	yes	0.05
Barium	2	0.17	yes	2
Beryllium	0.004	0.0042	no	0.0042
Cadmium	0.005	0.030	no	0.030
Chromium	0.1	0.049	yes	0.1
Lead	0.05	0.010	yes	0.05
Mercury	0.002	0.00050	yes	0.002
Nickel	0.1	0.10	no	0.10
Selenium	0.05	0.017	yes	0.05
Thallium	0.002	0.018	no	0.018

AWQS -- Aquifer water quality standard

AL -- Alert level

AQL -- Aquifer quality limit

**PROCEDURE FOR DETERMINING ALERT LEVELS
AND AQUIFER QUALITY LIMITS FOR
GROUNDWATER COMPLIANCE MONITORING
BHP FLORENCE**

Procedure for Determining Alert Levels and Aquifer Quality Limits for Groundwater Compliance Monitoring - BHP Florence

INTRODUCTION

The purpose of this report is to demonstrate the methodology used to develop alert levels (ALs) and aquifer quality limits (AQLs) for groundwater compliance monitoring at the BHP Florence facility (Facility). Statistical analysis was generally conducted according to principles presented in Appendix F of the APP application. At this time, concentration limits for 11 of the 31 point of compliance (POC) wells have been determined and submitted to the Arizona Department of Environmental Quality (Brown and Caldwell, 1996). Limits for the remaining POC wells will be determined after sufficient data are collected.

Prediction intervals with verification resampling was the statistical method chosen to set ALs and determine groundwater quality compliance at the Facility. The resampling scheme that was chosen has been described as "one of two samples inbounds" (Gibbons, 1994). With this scheme, one verification resample is allowed and an exceedance is declared if both samples are greater than the prediction limit. For data sets with three or more detected values of different magnitude, the AL was set equal to the upper limit of a prediction interval calculated from independent background samples (a lower limit was also calculated for pH).

Normal prediction intervals were chosen because most of the data sets for fluoride (F), magnesium (Mg), sulfate (SO₄), total dissolved solids (TDS), and pH were shown to be normally distributed. Data sets for antimony (Sb), arsenic (As), manganese (Mn), mercury (Hg), and nickel (Ni) were assumed to be normally distributed even though they were not tested due to the high percentage of non-detected values. Intrawell prediction intervals were used for F, Mg, SO₄, TDS and pH because the data indicated significant spatial variability. Interwell prediction intervals were used for Sb, As, Mn, Hg and Ni because, for many data sets, there were an insufficient number of detected values to employ intrawell techniques. Also, the presence or absence of spatial variability was difficult to determine due to high percentages of non-detects.

DATA PREPARATION

General

The following steps were taken to prepare the raw data for analysis:

1. Duplicate analytical results were removed.
2. Results for total metals and filtered ions were removed.
3. The initial 12 months of data was screened for outliers, the outliers were removed, and new values were incorporated to replace the outliers.

Prepared data sets are presented in Tables 1 and 2.

Removal of Outliers

Data sets for the following analytes were examined for the presence of outliers: F, Mg, SO₄, TDS and pH. Due to large percentages of non-detected values, data sets for Sb, As, Mn, Hg and Ni were not examined for outliers.

Outliers that were removed from the data are shown in Table 1, and the procedure used to remove outliers is shown on a flow diagram in Figure 1. The first step of the procedure was to conduct normality tests on each data set using the Ryan-Joiner test available in the statistical software program MINITAB. The Ryan-Joiner test, which is similar to the Shapiro-Wilk test, is discussed in detail in a technical report available from Minitab Inc. (Ryan and Joiner, 1976).

Data sets that were nonnormally distributed were screened for potential outliers using boxplots as suggested by EPA (1996, p. 4.4-1). All values that fell outside the outer fences of a standard boxplot were identified as potential outliers. The outer fences are located at a distance of three times the width of the interquartile range from either end of the box. Equations for the outer fences are as follows:

$$\text{Upper outer fence} = 75Q + 3(75Q - 25Q) \quad (\text{eq. 1})$$

$$\text{Lower outer fence} = 25Q - 3(75Q - 25Q) \quad (\text{eq. 2})$$

Where 25Q is the 25th quartile and 75Q is the 75th quartile.

Data sets that had potential outliers were tested for normality after the outliers were removed. If the data set was nonnormally distributed, the outlier was replaced with the next available value, and the procedure for removing outliers was repeated. If the data set was normally distributed, Dixon's Extreme test for outliers was employed. Dixon's test (described in EPA, 1996 and Gibbons, 1994) assumes that the data set without the outlier is normally distributed. If Dixon's test showed that the potential outlier was statistically significant, it was replaced with the next available value, and the procedure for removing outliers was repeated.

ALERT LEVELS

General

For all analytes except mercury, ALs were set equal to the upper limit of a normal prediction interval calculated from the background data. In addition, lower limits were calculated for pH. Prediction limits for introwell and interwell comparisons are presented in Tables 1 and 2, respectively.

Upper prediction limits were calculated as follows:

$$UL = \text{mean} + (\text{standard deviation} * \text{factor}) \quad (\text{eq. 3})$$

Lower prediction limits were calculated as follows:

$$LL = \text{mean} - (\text{standard deviation} * \text{factor}) \quad (\text{eq. 4})$$

Prediction limits were not determined for mercury because the data set only included two detected values. The AL for mercury was calculated as follows:

$$AL = RL + [(AWQS - RL)/2] \quad (\text{eq. 5})$$

Where *RL* is the reporting limit and *AWQS* is the aquifer water quality standard.

Mean and Standard Deviation

Conventional statistical methods available on Microsoft Excel 5.0 were used to calculate the mean and standard deviation for data sets that did not contain non-detected values (e.g. F, Mg, SO₄, TDS and pH). The maximum likelihood estimators (MLE) described by Gibbons (1994, pp. 189-193)¹ was used to estimate the mean and standard deviation for Sb, As, Mn and Ni. Gibbons presented and evaluated several methods for estimating the mean and standard deviation of censored data sets. For groundwater monitoring applications, he concluded that "overall, the MLE appears to work best for small normally distributed samples".

Prediction Limit Factors

Three prediction limit factors were used to calculate ALs for the compliance monitoring program. Assumptions made to determine the factors are summarized below.

CASE 1: F, Mg, SO₄ and TDS - Level I - intrawell

$$\alpha = \text{desired sitewide false positive rate} = 0.05$$

$$\begin{aligned} k &= \text{total number of statistical tests} = \text{number of wells} * \text{number of analytes} = 31 * 4 \\ &= 124 \end{aligned}$$

$$\text{To adjust for multiple comparisons (statistical tests), } \alpha^* = \alpha / k = 0.05 / 124 = 4.0$$

EE-4

$$N = \text{number of background samples} = 12$$

¹ There are two inconsistencies in the MLE procedure presented by Gibbons. Near the top of page 190, x_o , the censoring point, is not equal to MDL/2 (it is equal to the reporting limit, which may or may not be the MDL). Also, the right side of the equation at the bottom of page 192 for the standard deviation should be raised to the 1/2 power.

CASE 2: F, Mg, SO₄, TDS and pH - Level II - intrawell

α = desired sitewide false positive rate = 0.05

k = number of wells * number of analytes = 31 * 11 = 341 (the 11 analytes consist of F, Mg, SO₄, TDS, pH, Sb, As, Mn, Hg, Ni, and adjusted alpha)

$\alpha^* = \alpha / k = 0.05 / 341 = 1.47 \text{ EE-}4$

N = number of background samples = 12

"factor" = 3.32 (Table 8.3 using logarithmic interpolation)

CASE 3: Sb, As, Mn and Ni - Level II - interwell

α = Bonferroni-adjusted sitewide false positive rate
= desired sitewide false positive rate / number of constituents
= 0.05 / 11 = 0.0046

k = number of wells = 31

n = number of background samples = 12

"factor" = 3.26 (Tables 1.8 and 1.11 using linear interpolation)

AQUIFER QUALITY LIMITS

AQLs were established for analytes in the compliance monitoring program that have aquifer water quality standards (AWQS). Those analytes include Sb, As, Hg and Ni. If the calculated AL was less than the AWQS, then the AQL was set equal to the AWQS. If the calculated AL was greater than or equal to the AWQS, then the AQL was set equal to the AL. The determination of AQLs for the Facility is summarized below.

Analyte	AWQS (mg/l)	Calculated AL (mg/l)	Is AL < AWQS ?	AQL (mg/l)
Sb	0.006	0.009	no	0.009
As	0.05	0.006	yes	0.05
Hg	0.002	0.001	yes	0.002
Ni	0.1	0.09	yes	0.1

REFERENCES

Brown and Caldwell. 1996. Memo and enclosures to Arizona Department of Environmental Quality, dated December 4, 1996.

EPA. 1996. Guidance for Data Quality Assessment, Practical Methods for Data Analysis. EPA QA/G-9, QA96 version, EPA/600/R-96/084, July 1996.

Gibbons, R.D. 1994. Statistical Methods for Groundwater Monitoring. John Wiley & Sons, Inc., New York, NY, 286 pages.

Ryan, T.A., Jr. and B.L. Joiner. 1976. Normal Probability Plots and Tests for Normality. Minitab Inc.